

WO02047626

Publication Title:

No title available

Abstract:

Abstract not available for WO02047626 Data supplied from the esp@cenet database - Worldwide

Courtesy of <http://v3.espacenet.com>

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
20 June 2002 (20.06.2002)

PCT

(10) International Publication Number
WO 02/47626 A1

- (51) International Patent Classification⁷: **A61K 7/02**, 7/025, 7/027
- (21) International Application Number: PCT/US00/33596
- (22) International Filing Date:
12 December 2000 (12.12.2000)
- (25) Filing Language: English
- (26) Publication Language: English
- (71) Applicant (*for all designated States except US*): **L'OREAL SA** [FR/FR]; 14, rue Royale, F-75008 Paris (FR).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): **CAVAZZUTI, Roberto** [US/US]; 800 Forest Avenue, Apt. 60, Westfield, NJ 07091 (US). **FERRARI, Véronique** [FR/FR]; 12, rue Victor Hugo, F-94700 Maisons-Alfort (FR). **MATTOX, Brian** [US/US]; 778 Belvidere Avenue, Plainfield, NJ 07060 (US). **PINZON, Carlos, O.** [US/US]; 45 Linden Street, Hackensack, NJ 07601 (US). **THAU, Paul** [US/US]; 181 Dogwood Lane, Berkeley Heights, NJ 07922 (US).
- (74) Agents: **GARRETT, Arthur, S.** et al.; Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P., 1300 I Street, N.W., Washington, DC 20005-3315 (US).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— *with international search report*
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: COSMETIC COMPOSITION COMPRISING HETEROPOLYMERS AND A SOLID SUBSTANCE AND METHOD OF USING SAME

(57) Abstract: Structured compositions comprising at least one liquid fatty phase structured with at least one structuring polymer and at least one solid substance that has a melting point of about 45 °C. This invention may be in the form of stable sticks and may give a non-migrating deposit when applied.

WO 02/47626 A1

COSMETIC COMPOSITION COMPRISING HETERO POLYMERS AND A SOLID SUBSTANCE AND METHOD OF USING SAME

The present invention relates to compositions and methods for care of, for treating and for making-up for the skin, including the scalp, and/or for the lips, of human beings, and/or for other keratinous materials, such as keratinous fibers, comprising at least one liquid fatty phase structured with at least one structuring polymer containing a hetero atom. This invention may be in the form of a stable composition.

Structured liquid fatty phases in cosmetic or dermatological products are known in the art. As used herein, "structured" means gelled and/or rigidified. Structured liquid fatty phases may be found in solid compositions such as deodorants, balms, lip compositions, concealer products, and cast foundations.

As used herein, "liquid fatty phase" means a fatty phase which is liquid at room temperature (25°C) and at atmospheric pressure (760 mmHg) and which comprises at least one fatty substance, such as an oil, which is liquid at room temperature and not soluble in water. If the liquid fatty phase comprises two or more fatty substances, they should be mutually compatible.

Structured liquid fatty phases may make it possible to control the exudation of the liquid fatty phase from the solid compositions of which they are components, including exudation in a wet or hot atmosphere or environment. Structuring of the liquid fatty phase may also limit bleeding of this phase outside of the intended area of application and especially into wrinkles and fine lines after it has been deposited, for example, on keratinous material. As used herein, "keratinous material" is meant to comprise hair, lips, skin, scalp and superficial body growths such as eyelashes, eyebrows and nails. "Keratinous fiber" includes hair, eyelashes, and eyebrows. A large migration of a liquid fatty phase comprising coloring agents such as in lip or eyeshadow compositions may lead to an unaesthetic effect around the lips or eyes which may accentuate the wrinkles and fine lines. Consumers have

cited this migration as a drawback of conventional lip and eyeshadow compositions.

U.S. 5,783,657, for example, describes structuring a composition by using a polyamide in a stick form. However, such a stick composition is usually not mechanically and/or thermally stable. Indeed, a part of the oil contained in such a composition tends to go outside or exude from the stick. Further, when the stick is applied on the skin or lips, said stick may be broken.

The inventors have found that the use of specific structuring polymers, defined more fully below, such as polyamide polymers, in at least one liquid fatty phase and the addition of a solid substance that has a melting point of about 45°C, for example about 47°C, or greater may make it possible to structure a composition comprising at least one liquid fatty phase while also resulting in a stable composition. As used herein, "about" before a number given as a melting point means the range or natural variation in the melting point. The range or variation may be due to impurities, crystallinity, and/or measurement method and conditions.

In one embodiment, the invention provides a composition comprising a liquid fatty phase which comprises: (i) at least one structuring polymer comprising a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one hetero atom; and (ii) at least one solid substance that has a melting point of about 45°C or greater, wherein the at least one solid substance is not stearylaluminum hectorite, silica, talc, or paraffin wax. In a further embodiment, the at least one solid substance that has a melting point of about 45°C or greater is an organic solid substance.

As used herein, the expression "at least one" means one or more and thus includes individual components as well as mixtures/combinations.

In another embodiment, the invention provides a composition comprising a liquid fatty phase which comprises: (i) at least one structuring polymer, wherein said at least one structuring polymer is at least one polyamide polymer comprising a polymer skeleton which comprises at least

one amide repeating unit; and (ii) at least one solid substance that has a melting point of 45°C or greater, wherein the at least one solid substance is not stearalkonium hectorite, silica, talc, or paraffin wax. In further embodiment, the at least one solid substance that has a melting point of about 45°C or greater is an organic solid substance.

In yet another embodiment, the invention provides an anhydrous composition comprising a liquid fatty phase which comprises: (i) at least one structuring polymer comprising a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one hetero atom; and (ii) at least one solid substance that has a melting point of about 45°C or greater, wherein the at least one solid substance is not stearalkonium hectorite.

The invention also provides a composition comprising at least one liquid fatty phase which comprises: (i) at least one structuring polymer comprising a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one hetero atom; and at least one terminal fatty chain chosen from alkyl chains and alkenyl chains, wherein said at least one terminal fatty chain is bonded to said polymer skeleton via at least one linking group; and (ii) at least one solid substance that has a melting point of about 45°C or greater.

In one embodiment, the at least one structuring polymer is present in an amount effective to provide structure to said fatty phase. The at least one structuring polymer and the at least one solid substance are present in a combined amount to provide the composition with stability. In a further embodiment, the at least one structuring polymer and the at least one solid substance provide resistance to shear. In a further embodiment, the at least one structuring polymer and the at least one solid substance provide the composition with stability and provide resistance to shear.

The invention also provides a method for providing stability to a composition comprising a liquid fatty phase, comprising: including in said liquid fatty phase at least one structuring polymer comprising a polymer

skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one hetero atom, such as a structuring polymer comprising a polyamide skeleton. For example, the polymer skeleton comprises at least one end group with at least one chain chosen from alkyl chains comprising at least four carbon atoms and alkenyl chains comprising at least four carbon atoms, bonded to the at least one polyamide skeleton via at least one linking group. The polymer skeleton may comprise at least one terminal group and/or at least one pendant group with at least one chain chosen from alkyl chains comprising at least four carbon atoms and alkenyl chains comprising at least four carbon atoms, bonded to any carbon or nitrogen of the polyamide skeleton via at least one linking group. The at least one structuring polymer is present in an amount effective to provide structure to said fatty phase. At least one solid substance that has a melting point of about 45°C, for example about 47°C, or greater is also included in the composition. The components may be added in any order. The at least one structuring polymer and the at least one solid substance are present in a combined amount effective to provide the composition with stability.

It is to be understood that both the foregoing general description and the following detailed description are exemplary and explanatory only and are not restrictive of the invention as claimed.

One subject of the invention is cosmetic and/or dermatological compositions which are useful for the care, make-up and/or treating of at least one keratinous material, including at least one keratinous fiber, which may be of suitable hardness to allow preparation of these compositions in the form of a stick or other structured form which may be stable.

As defined herein, stability is tested by placing the composition in a controlled environment chamber for 8 weeks at 25°C. In this test, the physical condition of the sample is inspected as it is placed in the chamber. The sample is then inspected again at 24 hours, 3 days, 1 week, 2 weeks, 4 weeks and 8 weeks. At each inspection, the sample is examined for abnormalities in the composition such as bending or leaning if the

composition is in stick form, phase separation, melting, or syneresis. As used herein syneresis is the appearance of droplets on the surface of a composition that are visible to the naked eye. The stability is further tested by repeating the 8 week test at 4°C, 37°C, 45°C, 50°C and under freeze-thaw conditions. A composition is considered to lack stability if in any of these tests an abnormality that impedes functioning of the composition is observed. The skilled artisan will readily recognize an abnormality that impedes functioning of a composition based on the intended application.

The invention applies not only to make-up products for at least one keratinous material such as lip compositions, lip pencils, foundations including foundations which may be cast in the form of a stick or a dish, concealer products, temporary tattoo products, eyeliners, mascara bars, but also to body hygiene products such as deodorant sticks, and to care products and products for treating at least one keratinous material, such as sunscreen and anti-sun products which may be in stick form. The present invention may be in the form of mascara product including mascara bars, an eyeliner product, a foundation product, a lipstick product, a blush for cheeks or eyelids, a deodorant product, a make-up product for the body, a make-up-removing product, an eyeshadow product, a face powder product, a concealer product, a treating shampoo product, a hair conditioning product, a sun screen, colorant for the skin or hair, or skin care formula such as, for example, anti-pimple or shaving cut formulas. As defined herein, a deodorant product is a personal hygiene product and does not relate to care, make-up or treatment of keratin materials, including keratin fibers.

For example, the composition of the present invention may be in a form chosen from a paste, a solid, a gel, and a cream. It may be an emulsion, *i.e.*, an oil-in-water or water-in-oil emulsion, a multiple emulsion, *e.g.*, an oil-in-water-in-oil emulsion or water-in-oil-in-water emulsion, or a solid, rigid or supple gel, including anhydrous gels. In one embodiment, the composition of the invention is anhydrous. The composition of the invention

may, for example, comprise an external or continuous fatty phase. In another embodiment, the composition of the invention is transparent or clear, including for example, a composition without pigments. The composition can also be in a form chosen from a translucent anhydrous gel and a transparent anhydrous gel. The composition can also be a molded composition or cast as a stick or a dish. The composition in one embodiment is a solid such as a molded stick or a poured stick.

Structuring polymer

In one embodiment, the at least one structuring polymer in the composition of the invention is a solid that is not deformable at room temperature (25°C) and atmospheric pressure (760 mmHg). In a further embodiment, the at least one structuring polymer is capable of structuring the composition without opacifying it. As defined above, the at least one structuring polymer of the present invention comprises a polymer skeleton comprising at least one hydrocarbon-based repeating unit comprising at least one hetero atom. In one embodiment, the at least one structuring polymer further comprises at least one terminal fatty chain chosen from alkyl and alkenyl chains, such as of at least 4 atoms, and further such as comprising 8 to 120 carbon atoms, bonded to the polymer skeleton via at least one linking group. The terminal fatty chain may, for example, be functionalized. The at least one structuring polymer may also further comprise at least one pendant fatty chain chosen from alkyl and alkenyl chains, such as of at least 4 atoms, and further such as comprising 8 to 120 carbon atoms, bonded to any carbon or hetero atom of the polymer skeleton via at least one linking group. The pendant fatty chain may, for example, be functionalized. The at least one structuring polymer may comprise both at least one pendant fatty chain and at least one terminal fatty chain as defined above, and one or both types of chains can be functionalized.

In one embodiment, the structuring polymer comprises at least two hydrocarbon-based repeating units. As a further example, the structuring

polymer comprises at least three hydrocarbon-based repeating units and as an even further example, the at least three repeating units are identical.

As used herein, "functionalized" means comprising at least one functional group. Non-limiting examples of functional groups include hydroxyl groups, ether groups, oxyalkylene groups, polyoxyalkylene groups, carboxylic acid groups, amine groups, amide groups, halogen containing groups, including fluoro and perfluoro groups, halogen atoms, ester groups, siloxane groups and polysiloxane groups.

For purposes of the invention, the expression "functionalized chain" means, for example, an alkyl chain comprising at least one functional (reactive) group chosen, for example, from those recited above. For example, in one embodiment, the hydrogen atoms of at least one alkyl chain may be substituted at least partially with fluorine atoms.

According to the invention, these chains may be linked directly to the polymer skeleton or via an ester function or a perfluoro group.

For the purposes of the invention, the term "polymer" means a compound containing at least 2 repeating units, such as, for example, a compound containing at least 3 repeating units, which may be identical.

As used herein, the expression "hydrocarbon-based repeating unit" includes a repeating unit comprising from 2 to 80 carbon atoms, such as, for example, from 2 to 60 carbon atoms. The at least one hydrocarbon-based repeating unit may also comprise oxygen atoms. The hydrocarbon-based repeating unit may be chosen from saturated and unsaturated hydrocarbon-based repeating units which in turn may be chosen from linear hydrocarbon-based repeating units, branched hydrocarbon-based repeating units and cyclic hydrocarbon-based repeating units. The at least one hydrocarbon-based repeating unit may comprise, for example, at least one hetero atom that is part of the polymer skeleton, *i.e.*, not pendant. The at least one hetero atom may be chosen, for example, from nitrogen, sulphur, and phosphorus. For example, the at least one hetero atom may be a nitrogen atom, such as a non-pendant nitrogen atom. In another embodiment, the at least one

hydrocarbon-based repeating unit may comprise at least one hetero atom with the proviso that the at least one hetero atom is not nitrogen. In another embodiment, the at least one hetero atom is combined with at least one atom chosen from oxygen and carbon to form a hetero atom group. In one embodiment, the hetero atom group comprises a carbonyl group.

The at least one repeating unit comprising at least one hetero atom may be chosen, for example, from amide groups, carbamate groups, and urea groups. In one embodiment, the at least one repeating unit comprises amide groups forming a polyamide skeleton. In another embodiment, the at least one repeating unit comprises carbamate groups and/or urea groups forming a polyurethane skeleton, a polyurea skeleton and/or a polyurethane-polyurea skeleton. The pendant chains, for example, can be linked directly to at least one of the hetero atoms of the polymer skeleton. In yet another embodiment, the at least one hydrocarbon-based repeating unit may comprise at least one hetero atom group with the proviso that the at least one hetero atom group is not an amide group. In one embodiment, the polymer skeleton comprises at least one repeating unit chosen from silicone units and oxyalkylene units, the at least one repeating unit being between the hydrocarbon-based repeating units.

In one embodiment, the compositions of the invention comprise at least one structuring polymer with nitrogen atoms, such as amide, urea, or carbamate units, such as amide units, and at least one polar oil.

In one embodiment, in the at least one structuring polymer, the percentage of the total number of fatty chains ranges from 40% to 98% relative to the total number of repeating units and fatty chains, and as a further example, from 50% to 95%. In a further embodiment wherein the polymer skeleton is a polyamide skeleton, in the at least one structuring polymer, the percentage of the total number of fatty chains ranges from 40% to 98% relative to the total number of all amide units and fatty chains, and as a further example, from 50% to 95%.

In a further embodiment, the nature and proportion of the at least one hydrocarbon-based repeating unit comprising at least one hetero atom

depends on the nature of a liquid fatty phase of the composition and is, for example, similar to the nature of the fatty phase. For example, not to be limited as to theory, the more polar the hydrocarbon-based repeating units containing a hetero atom, and in high proportion, which corresponds to the presence of several hetero atoms, the greater the affinity of the at least one structuring polymer to polar oils. Conversely, the more non-polar, or even apolar, and lesser in proportion the hydrocarbon-based repeating units containing a hetero atom, the greater the affinity of the polymer for apolar oils.

In another embodiment, the invention is drawn to a structured composition containing at least one liquid fatty phase structured with at least one structuring polymer, wherein the at least one structuring polymer is a polyamide comprising a polymer skeleton comprising at least one amide repeating unit and optionally at least one pendant fatty chain and/or at least one terminal chain that are optionally functionalized and comprise from 8 to 120 carbon atoms, bonded to at least one of the amide repeating units via at least one linking group. The liquid fatty phase further contains at least one organogellator for gelling the liquid fatty phase. The at least one liquid fatty phase, the at least one structuring polyamide and the at least one organogellator together form a physiologically acceptable medium.

When the structuring polymer has amide repeating units, the pendant fatty chains may be linked to at least one of the nitrogen atoms in the amide repeating units.

The structuring polymer, for example the polyamide polymer, may have a weight-average molecular mass of less than 100,000, such as less than 50,000. In another embodiment, the weight-average molecular mass may range from 1000 to 30,000, such as from 2000 to 20,000, further such as from 2000 to 10,000.

As discussed, the at least one structuring polymer may, for example, be chosen from polyamide polymers. A polyamide polymer may comprise, for example, a polymer skeleton which comprises at least one amide repeating unit, *i.e.*, a polyamide skeleton. In one embodiment, the polyamide skeleton

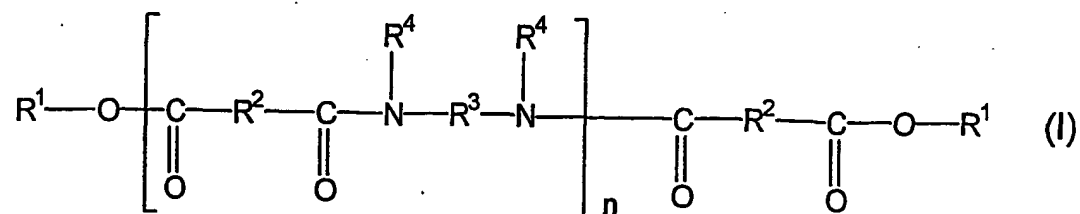
may further comprise at least one terminal fatty chain chosen from alkyl chains, for example, alkyl chains comprising at least four carbon atoms, and alkenyl chains, for example, alkenyl chains comprising at least four carbon atoms, bonded to the at least one polyamide skeleton via at least one linking group, and/or at least one pendant fatty chain chosen from alkyl chains, for example, alkyl chains comprising at least four carbon atoms, and alkenyl chains, for example, alkenyl chains comprising at least four carbon atoms, bonded to the at least one polyamide skeleton via at least one linking group. In one embodiment, the polyamide skeleton may comprise at least one terminal fatty chain chosen from fatty chains comprising 8 to 120 carbon atoms, such as, for example, 12 to 68 carbon atoms, bonded to the at least one polyamide skeleton via at least one linking group and/or at least one pendant fatty chain chosen from fatty chains comprising 8 to 120 carbon atoms, such as, for example, 12 to 68 carbon atoms, bonded to the at least one polyamide skeleton via at least one linking group, such as bonded to any carbon or nitrogen of the polyamide skeleton via the at least one linking group. In one embodiment, the at least one linking group is chosen from single bonds and urea, urethane, thiourea, thiourethane, thioether, thioester, ester, ether and amine groups. The bond is, for example, an ester bond. In one embodiment, these polymers comprise a fatty chain at each end of the polymer skeleton, such as the polyamide skeleton.

In one embodiment, due to the presence of at least one chain, the polyamide polymers may be readily soluble in oils (*i.e.*, water-immiscible liquid compounds) and thus may give macroscopically homogeneous compositions even with a high content (at least 25%) of the polyamide polymers, unlike certain polymers of the prior art that do not contain such alkyl or alkenyl chains at the end of the polyamide skeleton. As defined herein, a composition is soluble if it has a solubility of greater than 0.01 g per 100 ml of solution at 25°C.

In a further embodiment, the polyamide polymers can be chosen from polymers resulting from at least one polycondensation reaction between at least one acid chosen from dicarboxylic acids comprising at least 32 carbon atoms, such as 32 to 44 carbon atoms, and at least one amine chosen from diamines comprising at least 2 carbon atoms, such as from 2 to 36 carbon atoms, and triamines comprising at least 2 carbon atoms, such as from 2 to 36 carbon atoms. The dicarboxylic acids can, for example, be chosen from dimers of at least one fatty acid comprising at least 16 carbon atoms, such as oleic acid, linoleic acid and linolenic acid. The at least one amine can, for example, be chosen from diamines, such as ethylenediamine, hexylenediamine, hexamethylenediamine, phenylenediamine and triamines, such as ethylenetriamine.

The polyamide polymers may also be chosen from polymers comprising at least one terminal carboxylic acid group. The at least one terminal carboxylic acid group can, for example, be esterified with at least one alcohol chosen from monoalcohols comprising at least 4 carbon atoms. For example, the at least one alcohol can be chosen from monoalcohols comprising from 10 to 36 carbon atoms. In a further embodiment, the monoalcohols can comprise from 12 to 24 carbon atoms, such as from 16 to 24 carbon atoms, and for example 18 carbon atoms.

In one embodiment, the at least one polyamide polymer may be chosen from those described in U.S. Patent No. 5,783,657, the disclosure of which is incorporated herein by reference, which are polymers of formula (I):



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one polyamide polymer ranges from 10% to 50% of the total number of all said ester groups and all said amide groups comprised in said at least one polyamide polymer;
- R^1 , which are identical or different, are each chosen from alkyl groups comprising at least 4 carbon atoms and alkenyl groups comprising at least 4 carbon atoms. In one embodiment, the alkyl group comprises from 4 to 24 carbon atoms and the alkenyl group comprises from 4 to 24 carbon atoms;
- R^2 , which are identical or different, are each chosen from C_4 to C_{42} hydrocarbon-based groups with the proviso that at least 50% of all R^2 are chosen from C_{30} to C_{42} hydrocarbon-based groups;
- R^3 , which are identical or different, are each chosen from organic groups comprising atoms chosen from carbon atoms, hydrogen atoms, oxygen atoms and nitrogen atoms with the proviso that R^3 comprises at least 2 carbon atoms; and
- R^4 , which are identical or different, are each chosen from hydrogen atoms, C_1 to C_{10} alkyl groups and a direct bond to at least one group chosen from R^3 and another R^4 such that when said at least one group is chosen from another R^4 , the nitrogen atom to which both R^3 and R^4 are bonded forms part of a heterocyclic structure defined in part by R^4-N-R^3 , with the proviso that at least 50% of all R^4 are chosen from hydrogen atoms.

In one embodiment, the at least one terminal fatty chain of formula (I) is linked to the last hetero atom, in this case nitrogen, of the polyamide skeleton. In a further embodiment, the terminal chains are functionalized. In another embodiment, the ester groups of formula (I), are linked to the terminal and/or pendant fatty chains, represent from 15% to 40% of the total number of ester and amide groups, such as, for example, from 20% to 35%.

In one embodiment, n may be an integer ranging from 1 to 5, for example, an integer ranging from 3 to 5. In the present invention, R^1 , which

are identical or different, can, for example, each be chosen from C_{12} to C_{22} alkyl groups, such as from C_{16} to C_{22} alkyl groups.

In the present invention, R^2 , which are identical or different, can, for example, each be chosen from C_{10} to C_{42} alkyl groups. At least 50% of all R^2 , which are identical or different, can, for example, each be chosen from groups comprising from 30 to 42 carbon atoms. At least 75% of all R^2 , which are identical or different, can, for example, each be chosen from groups comprising from 30 to 42 carbon atoms. In the two aforementioned embodiments, the remaining R^2 , which are identical or different, can, for example, each be chosen from C_4 to C_{19} groups, such as C_4 to C_{12} groups.

R^3 , which can be identical or different, can, for example, each be chosen from C_2 to C_{36} hydrocarbon-based groups and polyoxyalkylene groups. In another example, R^3 , which can be identical or different, can each, for example, be chosen from C_2 to C_{12} hydrocarbon-based groups. In another embodiment, R^4 , which can be identical or different, can each be chosen from hydrogen atoms. As used herein, hydrocarbon-based groups may be chosen from linear, cyclic and branched, and saturated and unsaturated groups. The hydrocarbon-based groups can be chosen from aliphatic and aromatic groups. In one example, the hydrocarbon-based groups are chosen from aliphatic groups. The alkyl and alkylene groups may be chosen from linear, cyclic and branched, and saturated and unsaturated groups.

In general, the pendant and terminal fatty chains may be chosen from linear, cyclic and branched, and saturated and unsaturated groups. The pendant and terminal fatty chains can be chosen from aliphatic and aromatic groups. In one example, the pendant and terminal fatty chains are chosen from aliphatic groups.

According to the invention, the structuring of the liquid fatty phase is obtained with the aid of at least one structuring polymer, such as the at least one polymer of formula (I). The at least one polyamide polymer of formula (I) may, for example, be in the form of a mixture of polymers, and this mixture

may also comprise a compound of formula (I) wherein n is equal to zero, *i.e.*, a diester.

Non-limiting examples of at least one polyamide polymer which may be used in the composition according to the present invention include the commercial products sold by Arizona Chemical under the names Uniclear 80 and Uniclear 100. These are sold, respectively, in the form of an 80% (in terms of active material) gel in a mineral oil and a 100% (in terms of active material) gel. These polymers have a softening point ranging from 88°C to 94°C, and may be mixtures of copolymers derived from monomers of (i) C_{36} diacids and (ii) ethylenediamine, and have a weight-average molecular mass of about 6000. Terminal ester groups result from esterification of the remaining acid end groups with at least one alcohol chosen from cetyl alcohol and stearyl alcohol. A mixture of cetyl and stearyl alcohols is sometimes called cetylstearyl alcohol.

Other non-limiting examples of at least one polyamide polymer which may be used in the composition according to the present invention include polyamide polymers resulting from the condensation of at least one aliphatic dicarboxylic acid and at least one diamine, the carbonyl and amine groups being condensed via an amide bond. Examples of these polyamide polymers are those sold under the brand name Versamid by the companies General Mills Inc. and Henkel Corp. (Versamid 930, 744 or 1655) or by the company Olin Mathieson Chemical Corp. under the brand name Onamid, in particular Onamid S or C. These resins have a weight-average molecular mass ranging from 6000 to 9000. For further information regarding these polyamides, reference may be made to U.S. Patent Nos. 3,645,705 and 3,148,125, the disclosures of which are hereby incorporated by reference.

Other examples of polyamides include those sold by the company Arizona Chemical under the references Uni-Rez (2658, 2931, 2970, 2621, 2613, 2624, 2665, 1554, 2623 and 2662) and the product sold under the reference Macromelt 6212 by the company Henkel. For further information regarding these polyamides, reference may be made to U.S. Patent No.

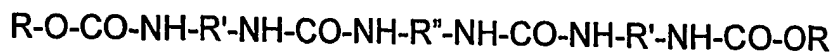
5,500,209, the disclosure of which is hereby incorporated by reference. Such polyamides display high melt viscosity characteristics. MACROMELT 6212, for example, has a high melt viscosity at 190°C of 30-40 poise (as measured by a Brookfield Viscometer, Model RVF #3 spindle, 20 RPM).

In a further embodiment, the at least one polyamide polymer may be chosen from polyamide resins from vegetable sources. Polyamide resins from vegetable sources may be chosen from, for example, the polyamide resins of U.S. Patent Nos. 5,783,657 and 5,998,570, the disclosures of which are herein incorporated by reference.

In one embodiment, the at least one polyamide polymer may be present in the composition in an amount ranging, for example, from 0.5% to 80%, such as from 2% to 60%, further such as from 5% to 40%, by weight relative to the total weight of the composition. In a further embodiment the at least one polyamide polymer may be present in the composition in an amount ranging, for example, from 5% to 25% by weight relative to the total weight of the composition.

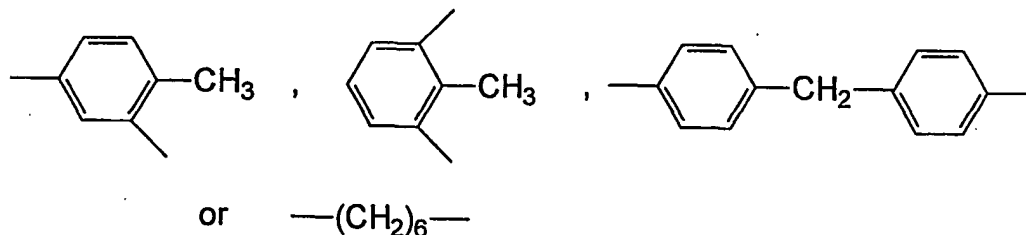
In one embodiment, the at least one structuring polymer in the composition according to the invention corresponds to the polyamide polymers of formula (I). Due to fatty chain(s), these polymers may be readily soluble in oils and thus lead to compositions that are macroscopically homogeneous even with a high content (at least 25%) of at least one structuring polymer.

When the at least one structuring polymer of the present invention comprises a urea urethane having the following formula:

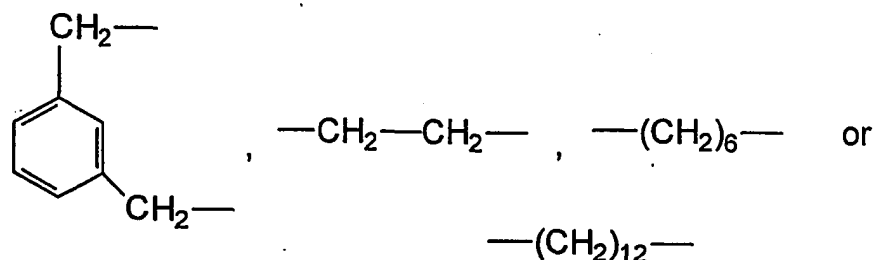
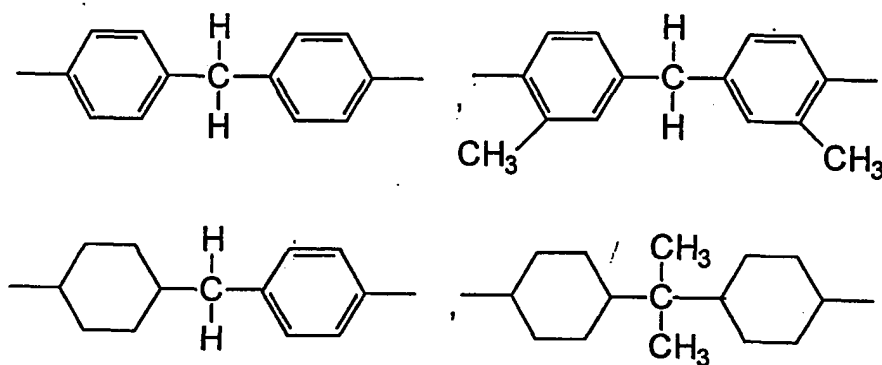


then R represents $\text{C}_n\text{H}_{2n+1}-$, wherein n represents an integer having a value greater than 22, for example from 23 to 120, and further, for example, from 23 to 68, or $\text{C}_m\text{H}_{2m+1}(\text{OC}_p\text{H}_{2p})_r-$, wherein m represents an integer having a value of greater than 18, for example, from 19 to 120, and further, for example, from 23 to 68, p represents an integer having a value of from 2 to 4, and r represents an integer having a value of from 1 to 10.

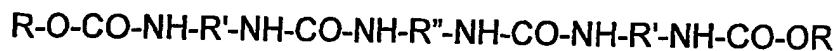
R' represents:



and R'' represents:

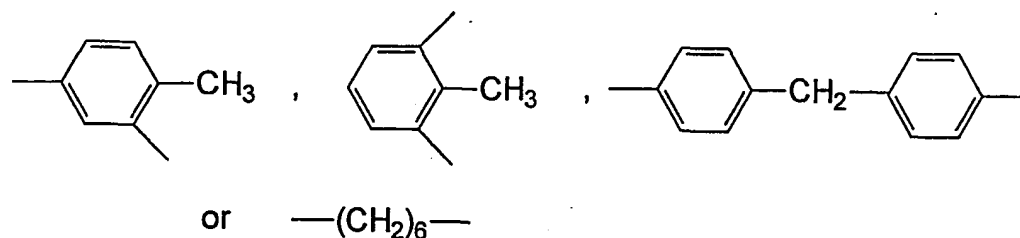


In another embodiment of the invention, the at least one structuring polymer is not a urea urethane of the formula:

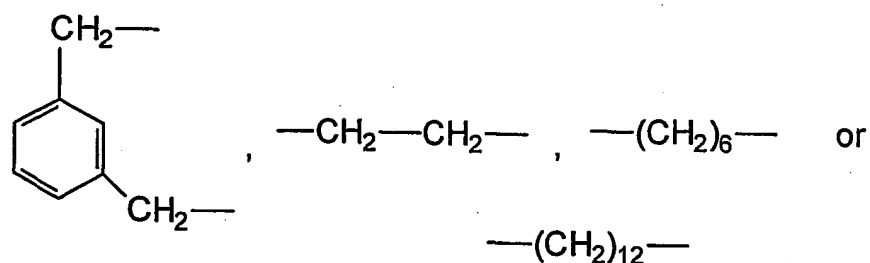
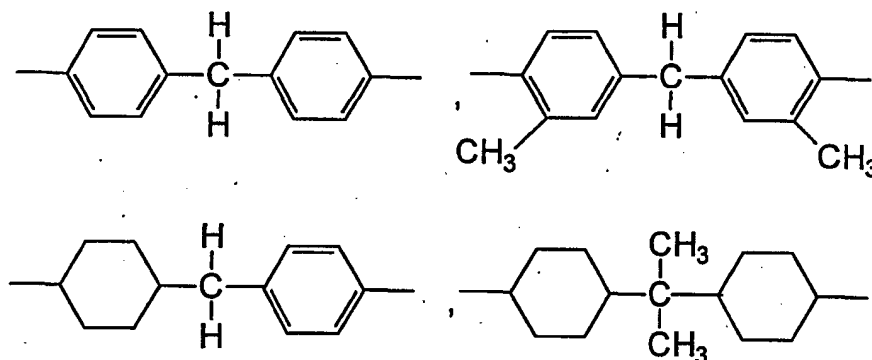


wherein R represents $C_nH_{2n+1}-$ or $C_mH_{2m+1}(C_pH_{2p}O)_r-$; n represents an integer having a value of from 4 to 22; m represents an integer having a value of from 1 to 18; p represents an integer having a value of from 2 to 4; and r represents an integer having a value of from 1 to 10.

R' represents:



and R'' represents:



In another embodiment, the present invention is drawn to a structured composition comprising at least one solid substance that has a melting point of about 45°C, for example about 47°C, or greater, and at least one liquid fatty phase structured with at least one structuring polymer comprising a polymer skeleton comprising at least one hydrocarbon-based repeating unit comprising at least one hetero atom, wherein the at least one structuring polymer further comprises at least one terminal fatty chain, optionally functionalized, chosen from alkyl chains and alkenyl chains, wherein said at least one terminal fatty chain is bonded to said polymer skeleton via at least

one linking group chosen from amides, ureas, and esters, wherein when said at least one linking group is chosen from esters, said at least one terminal fatty chain is chosen from branched alkyl groups. The at least one structuring polymer may also comprise at least one pendant fatty chain, optionally functionalized, chosen from alkyl chains and alkenyl chains, bonded to any carbon or hetero atom of the polymer skeleton via at least one linking group chosen from amides, ureas, and esters, wherein when said at least one linking group is chosen from esters, said at least one pendant fatty chain is chosen from branched alkyl groups. The at least one structuring polymer may comprise both at least one pendant fatty chain and at least one terminal fatty chain as defined above in this paragraph.

Further, an embodiment of the invention relates to a skin lip, or keratinous fiber care or make-up composition comprising a structured composition containing at least one liquid fatty phase structured with at least one structuring polymer comprising a polymer skeleton comprising at least one hydrocarbon-based repeating unit comprising at least one hetero atom and at least one solid substance that has a melting point of about 45°C, for example about 47°C, or greater. In another embodiment, the invention relates to a lipstick composition in stick form comprising at least one continuous liquid fatty phase, at least one solid substance that has a melting point of about 45°C, for example, about 47°C or greater, and at least one non-waxy structuring polymer having a weight-average molecular mass of less than 100,000.

Additionally, an embodiment of the invention relates to a skin, lip, or keratinous fiber care or make-up composition comprising a structured composition containing at least one liquid fatty phase structured with at least one structuring polymer comprising a polymer skeleton comprising at least one hydrocarbon-based repeating unit comprising at least one hetero atom, at least one solid substance that has a melting point of about 45°C, for example about 47°C, or greater, and at least one coloring agent.

Additionally, an embodiment of the invention relates to a method of making up skin, lips, or keratinous fibers or caring for skin, lips, or keratinous fibers comprising applying to said skin, lips, or keratinous fibers a structured composition containing at least one liquid fatty phase structured with at least one structuring polymer comprising a polymer skeleton comprising at least one hydrocarbon-based repeating unit comprising at least one hetero atom and at least one solid substance that has a melting point of about 45°C, for example about 47°C, or greater.

Solid Substance with a Melting Point of about 45°C or Greater

As defined here, a solid substance having a melting point of about 45°C or greater is a compound that is a solid at room temperature (25°C) and undergoes a reversible solid/liquid change of state at about 45°C, for example about 47°C, or greater, and at atmospheric pressure (760 mm). The at least one solid substance may, for example, have a melting point of about 50°C or greater. In one embodiment, the at least one solid substance is an organic solid substance having a melting point of about 45°C, for example about 47°C, or greater.

Such compounds include, but are not limited to, waxes, fillers, glitters, and solid polymers. In one embodiment, a filler is chosen from powders, nylons, PMMA crosspolymers, and silicas. In a further embodiment, the solid substance has a melting point of about 50°C to about 250°C, such as from about 60°C to about 200°C. A solid substance for use in the practice of the invention may comprise at least one crystallizable portion, however crystallization is not a limitation. The melting point is measured by DSC (Differential Scanning Calorimetry) with a rate of increase in temperature of 5°C or 10°C per minute. The melting point corresponds to the peak of the DSC curve.

As used herein, a "wax" may be any lipophilic fatty compound. It may be possible to make a wax miscible with oils by bringing the wax to its melting point, and, thereby, to form a microscopically homogeneous mixture, but once

the mixture has returned to room temperature, recrystallization of the wax occurs.

For the purposes of the application, waxes may be chosen from any wax that meets the criteria described herein. Non-limiting examples of such waxes include waxes of natural origin, such as beeswax, carnauba wax, candelilla wax, ouricury wax, Japan wax, cork fiber wax, sugar cane wax, paraffin waxes, lignite wax, microcrystalline waxes, lanolin wax, montan wax and ozokerites, hydrogenated oils such as hydrogenated jojoba oil, waxes of synthetic origin, such as polyethylene waxes derived from polymerization or copolymerization of ethylene, waxes obtained by Fischer-Tropsch synthesis, fatty acid esters and glycerides, and silicone waxes, such as derivatives of poly(di)methylsiloxane, including esterified silicon waxes.

The concentrations of the at least one solid substance and of the at least one structuring polymer may be chosen according to the desired hardness and desired stability of the compositions and according to the specific application envisaged. The respective concentrations of the at least one structuring polymer and of the at least one solid substance can be such that a disintegrable solid which does not flow under its own weight is obtained.

Depending on the intended application, such as a stick, hardness of the composition may also be considered. The hardness of a composition may, for example, be expressed in grams (g). The composition of the present invention may, for example, have a hardness ranging from 20 g to 2000 g, such as from 20 g to 900 g, and further such as from 20 g to 600 g.

This hardness is measured in one of two ways. A first test for hardness is according to a method of penetrating a probe into said composition and in particular using a texture analyzer (for example TA-XT2 from Rhéo) equipped with an ebonite cylinder of height 25 mm and diameter 8 mm. The hardness measurement is carried out at 20°C at the center of 5 samples of said composition. The cylinder is introduced into each sample of

composition at a pre-speed of 2 mm/s and then at a speed of 0.5 mm/s and finally at a post-speed of 2 mm/s, the total displacement being 1 mm. The recorded hardness value is that of the maximum peak observed. The measurement error is ± 50 g.

The second test for hardness is the "cheese wire" method, which involves cutting an 8.1 mm tube of composition and measuring its hardness at 20°C using a DFGHS 2 tensile testing machine from Indelco-Chatillon Co. at a speed of 100 mm/minute. The hardness value from this method is expressed in grams as the shear force required to cut a stick under the above conditions. According to this method, the hardness of compositions according to the present invention which may be in stick form may, for example, range from 30 g to 300 g, such as from 30 g to 250 g, and further such as from 30 g to 200 g.

The hardness of the composition of the present invention may be such that the compositions are self-supporting and can easily disintegrate to form a satisfactory deposit on a keratinous material. In addition, this hardness may impart good impact strength to the inventive compositions which may be molded or cast, for example, in stick or dish form.

The skilled artisan may choose to evaluate a composition using at least one of the tests for hardness outlined above based on the application envisaged and the hardness desired. If one obtains an acceptable hardness value, in view of the intended application, from at least one of these hardness tests, the composition falls within the scope of the invention.

According to the present invention, the compositions in stick form may also possess the properties of deformable, flexible elastic solids and may also have noteworthy elastic softness upon application to a keratinous material. The compositions in stick form of the prior art do not have this elasticity and flexibility.

The at least one structuring polymer may be present in a concentration ranging from 0.5% to 80% by weight of the total weight of the composition,

such as from 5% to 40%. The at least one solid substance may be present in a concentration of at least 3% by weight of the total weight of the composition, such as, for example, greater than 5%; further examples include from 5% to 70% by weight of the total weight of the composition, from 10% to 60% and from 10% to 50%.

Liquid fatty phase

The at least one liquid fatty phase, in one embodiment, may comprise at least one oil. The at least one oil, for example, may be chosen from polar oils and apolar oils including hydrocarbon-based liquid oils and oily liquids at room temperature. In one embodiment, the compositions of the invention comprise at least one structuring polymer and at least one polar oil. The polar oils of the invention, for example, may be added to the apolar oils, the apolar oils acting in particular as co-solvent for the polar oils.

According to the invention, the structuring of the at least one liquid fatty phase may, for example, be obtained with the aid of at least one polymer of formula (I). In general, the polymers of formula (I) may be in the form of mixtures of polymers, these mixtures also possibly containing a synthetic product corresponding to a compound of formula (I) in which n is 0, *i.e.*, a diester.

The liquid fatty phase of the composition may contain more than 30%, for example, more than 40%, of liquid oil(s) containing a group similar to that of the units containing a hetero atom of the structuring polymer, and for example from 50% to 100%. In one embodiment, the liquid fatty phase structured with a polyamide-type skeleton contains a high quantity, *i.e.*, greater than 30%, for example greater than 40% relative to the total weight of the liquid fatty phase, or from 50% to 100%, of at least one apolar, such as hydrocarbon-based, oil. For the purposes of the invention, the expression "hydrocarbon-based oil" means an oil essentially comprising carbon and hydrogen atoms, optionally with at least one group chosen from hydroxyl, ester, carboxyl, or ether groups.

For a liquid fatty phase structured with a polymer containing a partially silicone-based skeleton, this fatty phase may contain more than 30%, for example, more than 40%, relative to the total weight of the liquid fatty phase and, for example, from 50% to 100%, of at least one silicone-based liquid oil, relative to the total weight of the liquid fatty phase.

For a liquid fatty phase structured with an apolar polymer of the hydrocarbon-based type, this fatty phase may contain more than 30%, for example more than 40% by weight, or from 50% to 100% by weight, of at least one liquid apolar, such as hydrocarbon-based, oil, relative to the total weight of the liquid fatty phase.

For example, the at least one polar oil useful in the invention may be chosen from:

- hydrocarbon-based plant oils with a high content of triglycerides comprising fatty acid esters of glycerol in which the fatty acids may have varied chain lengths from C_4 to C_{24} , these chains possibly being chosen from linear and branched, and saturated and unsaturated chains; these oils are chosen from, for example, wheat germ oil, corn oil, sunflower oil, karite butter, castor oil, sweet almond oil, macadamia oil, apricot oil, soybean oil, cotton oil, alfalfa oil, poppy oil, pumpkin oil, sesame oil, marrow oil, rapeseed oil, avocado oil, hazelnut oil, grape seed oil, blackcurrant seed oil, evening primrose oil, millet oil, barley oil, quinoa oil, olive oil, rye oil, safflower oil, candlenut oil, passion flower oil and musk rose oil; or alternatively caprylic/capric acid triglycerides such as those sold by Stearineries Dubois or those sold under the names Miglyol 810, 812 and 818 by Dynamit Nobel;
- synthetic oils or esters of formula R_5COOR_6 in which R_5 is chosen from linear and branched fatty acid residues containing from 1 to 40 carbon atoms and R_6 is chosen from, for example, a hydrocarbon-based chain containing from 1 to 40 carbon atoms, on condition that $R_5 + R_6 \geq 10$, such as, for example, purcellin oil (cetostearyl octanoate), isononyl isononanoate, C_{12} - C_{15} alkyl benzoates, isopropyl myristate, 2-ethylhexyl palmitate, isostearyl isostearate and alkyl or polyalkyl octanoates, decanoates or ricinoleates;

hydroxylated esters such as isostearyl lactate and diisostearyl malate; and pentaerythritol esters;

- synthetic ethers containing from 10 to 40 carbon atoms;
- C₈ to C₂₆ fatty alcohols such as oleyl alcohol; and
- C₈ to C₂₆ fatty acids such as oleic acid, linolenic acid or linoleic acid.

The at least one apolar oil according to the invention is chosen from, for example, silicone oils chosen from volatile and non-volatile, linear and cyclic polydimethylsiloxanes (PDMSs) that are liquid at room temperature; polydimethylsiloxanes comprising alkyl or alkoxy groups which are pendant and/or at the end of the silicone chain, the groups each containing from 2 to 24 carbon atoms; phenylsilicones such as phenyl trimethicones, phenyl dimethicones, phenyl trimethylsiloxy diphenylsiloxanes, diphenyl dimethicones, diphenyl methyl diphenyl trisiloxanes and 2-phenylethyl trimethylsiloxysilicates; hydrocarbons chosen from linear and branched, volatile and non-volatile hydrocarbons of synthetic and mineral origin, such as volatile liquid paraffins (such as isoparaffins and isododecane) or non-volatile liquid paraffins and derivatives thereof, liquid petrolatum, liquid lanolin, polydecenes, hydrogenated polyisobutene such as Parleam®, and squalane; and mixtures thereof. The structured oils, for example those structured with polyamides such as those of formula (I) or the polyurethanes or polyureas or polyurea-urethanes, may be, in one embodiment, apolar oils, such as an oil or a mixture of hydrocarbon oils chosen from those of mineral and synthetic origin, chosen from hydrocarbons such as alkanes such as Parleam® oil, isoparaffins including isododecane, and squalane, and mixtures thereof. These oils may, in one embodiment, be combined with at least one phenylsilicone oil.

The liquid fatty phase, in one embodiment, contains at least one non-volatile oil chosen from, for example, hydrocarbon-based oils of mineral, plant and synthetic origin, synthetic esters or ethers, silicone oils and mixtures thereof.

In practice, the total liquid fatty phase may be present, for example, in an amount ranging from 1% to 99% by weight relative to the total weight of

the composition; further examples include ranges of 5% to 95.5%, 10% to 80%, and 20% to 75%.

For the purposes of the invention, the expression "volatile solvent or oil" means any non-aqueous medium capable of evaporating on contact with the skin or the lips in less than one hour at room temperature and atmospheric pressure. The volatile solvent(s) of the invention is(are) organic solvents, such as volatile cosmetic oils that are liquid at room temperature, having a non-zero vapor pressure, at room temperature and atmospheric pressure, ranging in particular from 10^{-2} to 300 mmHg and, for example, greater than 0.3 mmHg. The expression "non-volatile oil" means an oil which remains on the skin or the lips at room temperature and atmospheric pressure for at least several hours, such as those having a vapor pressure of less than 10^{-2} mmHg.

According to the invention, these volatile solvents may facilitate the staying power or long wearing properties of the composition on the skin, the lips or superficial body growths. The solvents can be chosen from hydrocarbon-based solvents, silicone solvents optionally comprising alkyl or alkoxy groups that are pendant or at the end of a silicone chain, and a mixture of these solvents.

The volatile oil(s), in one embodiment, is present in an amount ranging from 0% to 95.5% relative to the total weight of the composition, such as from 2% to 75% or, for example, from 10% to 45%. This amount will be adapted by a person skilled in the art according to the desired staying power or long wearing properties.

In one embodiment, the compositions of the invention are anhydrous. The at least one liquid fatty phase of the compositions of the invention may further comprises a dispersion of lipid vesicles. The compositions of the invention may also, for example, be in the form of a fluid anhydrous gel, a rigid anhydrous gel, a fluid simple emulsion, a fluid multiple emulsion, a rigid simple emulsion or a rigid multiple emulsion. The simple emulsion or multiple emulsion may comprise a continuous phase chosen from an aqueous phase optionally containing dispersed lipid vesicles or oil droplets, or a fatty phase

optionally containing dispersed lipid vesicles or water droplets. In one embodiment, the composition has a continuous oily phase or fatty phase and is more specifically an anhydrous composition, for example, a stick or dish form. An anhydrous composition is one that has less than 10% water by weight, such as, for example, less than 5% by weight.

The compositions of the invention may further comprise at least one additional fatty material. The at least one additional fatty material may, for example, be chosen from gums, fatty materials pasty at ambient temperature, and resins.

The composition of the present invention may also further comprise at least one suitable additive commonly used in the field concerned chosen from coloring agents, antioxidants, essential oils, preserving agents, fragrances, neutralizing agents, liposoluble polymers, and cosmetically active agents and dermatological active agents such as, for example, emollients, moisturizers, vitamins, essential fatty acids and sunscreens. The at least one additive is generally present in a concentration ranging up to 20% by weight of the total weight of the composition, such as up to 10%. The compositions of the present invention may also further comprise water, water, optionally thickened with an aqueous-phase thickener, or gelled with a gelling agent and/or containing ingredients soluble in water.

Needless to say, the person skilled in the art will take care to select the optional additional additives and the amount thereof such that at least one advantageous property of the composition according to the invention, such as stability, non-migration, is not, or is not substantially, adversely affected by the addition(s) envisaged.

The compositions of the invention may also comprise at least one coloring agent chosen from pigments, dyes, nacles, and pearling agents. The at least one coloring agent may be chosen, for example, in order to obtain make-up compositions which give good coverage, that is, which do not leave a significant amount of the at least one keratin material to which it is

applied showing through. The pigments may also reduce the sticky feel of the compositions, unlike soluble dyes.

Representative liposoluble dyes which may be used according to the present invention include Sudan red, DC Red 17, DC Green 6, β -carotene, soybean oil, Sudan brown, DC Yellow 11, DC Violet 2, DC Orange 5, annatto, and quinoline yellow. The liposoluble dyes, when present, generally have a concentration ranging up to 20% by weight of the total weight of the composition, such as from 0.1% to 6%.

The pigments which may be used according to the present invention may be chosen from white, colored, mineral, organic, coated and uncoated pigments. Representative examples of mineral pigments include titanium dioxide, optionally surface-treated, zirconium oxide, zinc oxide, cerium oxide, iron oxides, chromium oxides, manganese violet, ultramarine blue, chromium hydrate and ferric blue. Representative examples of organic pigments include carbon black, pigments of D & C type, and lakes based on cochineal carmine, barium, strontium, calcium and aluminum. If present, the pigments may have a concentration ranging up to 40% by weight of the total weight of the composition, such as from 1% to 35%, and further such as from 2% to 25%. In the case of a face powder product, the pigments, including nacreous pigments, may, for example, represent up to 90% by weight of the composition.

The nacreous pigments (or nacles) which may be used according to the present invention may be chosen from white nacreous pigments such as mica coated with titanium or with bismuth oxychloride, colored nacreous pigments such as titanium mica with iron oxides, titanium mica with ferric blue or chromium oxide, titanium mica with an organic pigment chosen from those mentioned above, and nacreous pigments based on bismuth oxychloride. The nacles, if present, may have a concentration ranging up to 30% by weight of the total weight of the composition, such as from 0.1% to 20%.

The compositions according to the present invention may be manufactured by one of ordinary skill in the art. For example, they may be manufactured by a process which comprises heating the at least one structuring polymer at least to its softening point, adding the at least one solid substance, in one embodiment in a melted form, and any suitable additives, if present, to the at least one structuring polymer followed by mixing the composition. The resultant homogeneous mixture may then be cast or poured in a suitable mold such as a lipstick mold, foundation mold, or deodorant mold or cast directly into the packaging articles such as a case or a dish.

The present invention is also directed to a cosmetic process for caring for, making up or treating a keratin material, such as that of a human being, and further such as human skin, lips, hair, eyebrows, nails, and eyelashes, comprising the application to a keratin material of a cosmetic composition comprising a liquid fatty phase comprising at least one structuring polymer, as defined herein, such as at least one structuring polymer comprising a polyamide skeleton. The polyamide skeleton comprises at least one end group with at least one chain chosen from alkyl chains comprising at least four carbon atoms and alkenyl chains comprising at least four carbon atoms, bonded to the at least one polyamide skeleton via at least one linking group. The polyamide skeleton may comprise at least one pendant group with at least one chain chosen from alkyl chains, for example, alkyl chains comprising at least four carbon atoms, and alkenyl chains, for example, alkenyl chains comprising at least four carbon atoms, bonded to any carbon or nitrogen of the polyamide skeleton via at least one linking group. The polyamide skeleton may also comprise at least one said end group and at least one said pendant group. The at least one structuring polymer is present in an amount effective to provide structure to said fatty phase. The composition further comprises at least one solid substance that has a melting point of about 45°C, for example about 47°C, or greater. The at least one structuring polymer and the at least one solid substance are present in a

combined amount to provide the composition with stability, as previously defined herein.

In another embodiment, the present invention is directed to a process of making a cosmetic composition in the form of a physiologically acceptable composition comprising including in said composition at least one liquid fatty phase, said at least one liquid fatty phase being structured with at least one structuring polymer composition comprising a polyamide skeleton. The polyamide skeleton comprises at least one end group with at least one chain chosen from alkyl chains, for example alkyl chains comprising at least four carbon atoms and alkenyl chains, for example alkenyl chains comprising at least four carbon atoms, bonded to the at least one polyamide skeleton via at least one linking group. The polyamide skeleton may further comprise at least one pendant group with at least one chain chosen from alkyl chains, for example, alkyl chains comprising at least four carbon atoms and alkenyl chains, for example alkenyl chains comprising at least four carbon atoms, bonded to any carbon or nitrogen of the polyamide skeleton via at least one linking group. The at least one structuring polymer is present in an amount effective to provide structure to said fatty phase. The composition further comprises at least one solid substance that has a melting point of about 45°C, for example about 47°C, or greater. The at least one structuring polymer and the at least one solid substance are present in a combined amount to provide the composition with stability, as previously defined herein.

The invention will be illustrated by, but is not intended to be limited to, the following examples.

Example 1: Anhydrous Compact Foundation

An anhydrous compact composition was prepared using the following ingredients.

Isostearyl Neopentanoate	qsp 100	%
Isononyl Isononanoate	15	%
Iron Oxides	3.4	%
Titanium Dioxide Anatase Form	10.6	%
Methylparaben	0.2	%
Talc	8.3	%
Kaolin	3	%
Titanium Dioxide treated with Dimethicone	5	%
Polyethylene wax MW 500 (weight avg. molecular weight)	5.7	%
Uniclear 100	7.4	%
Polymethyl Methacrylate	4	%
PTFE	4	%
Octyldodecanol	4.4	%

Preparation: The Uniclear 100 was solubilized (or dissolved), at 100°C, in a mixture of melted oils and wax, followed by addition of the pigments and fillers. The whole was mixed using a deflocculating turbomixer (Raynerie).

The stability of the composition was tested using the test described herein. The composition was found to have good stability in that there was no exudation at room temperature, at 45°C and at 47°C, both at one month and at eight weeks.

Example 2: Lip Stick

A lip stick composition was prepared using the following ingredients.

Isononyl Isononanoate	qsp 100	%
Uniclear 100	15	%
Diisostearyl Malate	12	%
Polyethylene wax	12	%
Polyglyceryl-2 Diisostearate	5.9	%
Iron Oxides	4	%
Nylon-12	4	%
Red 7 Lake	1.8	%
Titanium Dioxide	1.2	%
Barium Sulfate	0.6	%
Rosin / Colophonium	0.6	%

Preparation: The Uniclear 100 was solubilized (or dissolved), at 100°C, in a mixture of melted oils and wax, followed by addition of the pigments and fillers. The whole was mixed using a deflocculating turbomixer (Raynerie) and then case in lipstick molds.

The stability of the composition was tested using the test described herein. The composition was found to have good stability in that there was no exudation at room temperature, at 45°C and at 47°C, both at one month and at eight weeks.

Example 3: Lip Stick

A lip stick composition was prepared using the following ingredients.

PHASE A		
UNICLEAR 100	16	%
Carnauba wax	13	%
Isononyl isononoanoate	13	%
Di-isostearylmalate	9	%

PHASE B		
Hydrophobic silica	3	%
Hydrogenated poly isobutene	10.36	%
Actyldodecanol	3.52	%

PHASE C		
Pigments	12	%
Liquid lanolin	14	%
Hydrogenated poly isobutene	4.64	%
Octyldodecanol	1.48	%

Procedure: The Uniclear 100 and the oils of phase A were introduced into a heating vessel. The mixture was placed under magnetic stirring and then heated in a first stage to 100°C (to liquefy the Uniclear). A mixture comprising the silica gel (phase B), prepared beforehand, and the ground pigmentary material (phase C), which was heated beforehand to 100°C and homogenized with stirring, was introduced. The product obtained was placed in a heated mold ($T^{\circ} = 45^{\circ}\text{C}$) with stirring and, once setting had begun, was placed in a freezer ($T^{\circ} = -21^{\circ}\text{C}$) for 15 minutes.

a) Silica gel (phase B)

The gel was prepared, with stirring, in a Rayneri stirrer at 60°C, using a hotplate, by introducing the silica portionwise into the oily mixture formed from the other phase B ingredients

b) Ground pigmentary material (phase C)

The pigments were mixed with the oil heated to 60°C; the mixture was ground 3 times in a three-roll mill.

The sticks of lipstick had a hardness of 86 ± 5 g measured using a "cheese wire". These sticks of lipstick broke during the measurement of the dynamic fragility carried out on 3 sticks. The fragility of the composition is determined by a method wherein the stick is submitted to several back-and-forth movements on a support for 3 minutes at a speed of 60 back-and-forth movements/minute, at 20°C. The result is defined by the number of broken sticks with respect to the number of tested sticks.

We claim:

1. A composition comprising at least one liquid fatty phase which comprises:
 - (i) at least one structuring polymer comprising:
a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one hetero atom; and
 - (ii) at least one solid substance that has a melting point of about 45°C or greater,
wherein said at least one solid substance is not stearalkonium hectorite, silica, talc or paraffin wax.
2. The composition according to claim 1, wherein said at least one structuring polymer further comprises at least one of:
at least one terminal fatty chain chosen from alkyl chains and alkenyl chains, wherein said at least one terminal fatty chain is bonded to said polymer skeleton via at least one linking group; and
at least one pendant fatty chain chosen from alkyl chains and alkenyl chains, wherein said at least one pendant fatty chain is bonded to said polymer skeleton via at least one linking group.
3. The composition according to claim 2, wherein said alkyl chains and said alkenyl chains each comprise at least four carbon atoms.
4. The composition according to claim 3, wherein said alkyl chains and said alkenyl chains each comprise from 8 to 120 carbon atoms.
5. The composition according to claim 4, wherein said alkyl chains and said alkenyl chains each comprise from 12 to 68 carbon atoms.
6. The composition according to claim 2, wherein said at least one linking group is chosen from single bonds and urea, urethane, thiourea, thiourethane, thioether, thioester, ester, ether and amine groups.
7. The composition according to claim 6, wherein said at least one linking group is an ester group present in a proportion ranging from 15% to 40% of the total number of all ester and hetero atom groups in the at least one structuring polymer.

8. The composition according to claim 7, wherein said at least one linking group is an ester group present in a proportion ranging from 20% to 35% of the total number of all ester and hetero atom groups in the at least one structuring polymer.

9. The composition according to claim 2, wherein said at least one terminal fatty chain is functionalized.

10. The composition according to claim 2, wherein said at least one pendant fatty chain is functionalized.

11. The composition according to claim 2, wherein in said at least one structuring polymer, the percentage of the total number of fatty chains ranges from 40% to 98% relative to the total number of all repeating units and fatty chains in the at least one structuring polymer.

12. The composition according to claim 11, wherein in said at least one structuring polymer, the percentage of the total number of fatty chains ranges from 50% to 95% relative to the total number of all repeating units and fatty chains in the at least one structuring polymer.

13. The composition according to claim 1, wherein said at least one structuring polymer has a weight-average molecular mass of less than 100,000.

14. The composition according to claim 13, wherein said at least one structuring polymer has a weight-average molecular mass of less than 50,000.

15. The composition according to claim 14, wherein said at least one structuring polymer has a weight-average molecular mass ranging from 1000 to 30,000.

16. The composition according to claim 15, wherein said at least one structuring polymer has a weight-average molecular mass ranging from 2000 to 20,000.

17. The composition according to claim 16, wherein said at least one structuring polymer has a weight-average molecular mass ranging from 2000 to 10,000.

18. The composition according to claim 1, wherein said at least one hydrocarbon based repeating unit comprises from 2 to 80 carbon atoms.

19. The composition according to claim 18, wherein said at least one hydrocarbon based repeating unit comprises from 2 to 60 carbon atoms.

20. The composition according to claim 1, wherein said at least one hydrocarbon based repeating unit is chosen from saturated and unsaturated hydrocarbon-based units which are chosen from linear hydrocarbon-based repeating units, branched hydrocarbon-based repeating units and cyclic hydrocarbon-based repeating units.

21. The composition according to claim 1, wherein said at least one hetero atom of said at least one hydrocarbon-based repeating unit is chosen from nitrogen, sulphur, and phosphorus.

22. The composition according to claim 21, wherein said at least one hetero atom is a nitrogen atom.

23. The composition according to claim 21, wherein said at least one hetero atom is combined with at least one atom chosen from oxygen and carbon to form a hetero atom group.

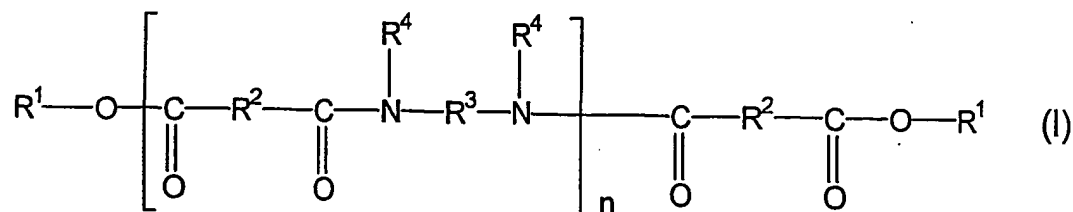
24. The composition according to claim 23, wherein said at least one hetero atom group further comprises a carbonyl group.

25. The composition according to claim 23, wherein said at least one hetero atom group is chosen from amide groups, carbamate groups, and urea groups.

26. The composition according to claim 25, wherein said at least one hetero atom group is an amide group and said polymer skeleton is a polyamide skeleton.

27. The composition according to claim 25, wherein said at least one hetero atom group is chosen from carbamate groups and urea groups and said polymer skeleton is chosen from a polyurethane skeleton, a polyurea skeleton and a polyurethane-polyurea skeleton.

28. The composition according to claim 1, wherein said at least one structuring polymer is chosen from polyamide polymers of formula (I):



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one polyamide polymer ranges from 10% to 50% of the total number of all ester groups and all amide groups comprised in said at least one polyamide polymer;
- R¹, which are identical or different, are each chosen from alkyl groups comprising at least 4 carbon atoms and alkenyl groups comprising at least 4 carbon atoms;
- R², which are identical or different, are each chosen from C₄ to C₄₂ hydrocarbon-based groups with the proviso that at least 50% of all R² are chosen from C₃₀ to C₄₂ hydrocarbon-based groups;
- R³, which are identical or different, are each chosen from organic groups comprising atoms chosen from carbon atoms, hydrogen atoms, oxygen atoms and nitrogen atoms, with the proviso that R³ comprises at least 2 carbon atoms; and
- R⁴, which are identical or different, are each chosen from hydrogen atoms, C₁ to C₁₀ alkyl groups and a direct bond to at least one group chosen from R³ and another R⁴ such that when said at least one group is chosen from another R⁴, the nitrogen atom to which both R³ and R⁴ are bonded forms part of a heterocyclic structure defined in part by R⁴-N-R³, with the proviso that at least 50% of all R⁴ are chosen from hydrogen atoms.

29. The composition according to claim 28, wherein in said formula (I), n is an integer ranging from 1 to 5.

30. The composition according to claim 29, wherein in said formula (I), n is an integer ranging from 3 to 5.
31. The composition according to claim 28, wherein in said formula (I), said alkyl groups of R^1 and said alkenyl groups of R^1 each independently comprise from 4 to 24 carbon atoms.
32. The composition according to claim 31, wherein in said formula (I), R^1 , which are identical or different, are each chosen from C_{12} to C_{22} alkyl groups.
33. The composition according to claim 32, wherein in said formula (I), R^1 , which are identical or different, are each chosen from C_{16} to C_{22} alkyl groups.
34. The composition according to claim 28, wherein in said formula (I), R^2 , which are identical or different, are each chosen from C_{10} to C_{42} hydrocarbon based groups with the proviso that at least 50% of all R^2 are chosen from C_{30} to C_{42} hydrocarbon based groups.
35. The composition according to claim 34, wherein at least 75% of all R^2 , which are identical or different, are chosen from C_{30} to C_{42} hydrocarbon based groups.
36. The composition according to claim 28, wherein in said formula (I), R^3 , which can be identical or different, are each chosen from C_2 to C_{36} hydrocarbon-based groups and polyoxyalkylene groups.
37. The composition according to claim 36, wherein R^3 , which can be identical or different, are each chosen from C_2 to C_{12} hydrocarbon-based groups.
38. The composition according to claim 28, wherein in said formula (I), R^4 , which can be identical or different, are each chosen from hydrogen atoms.
39. The composition according to claim 28, wherein said at least one polymer of formula (I) is in the form of a mixture of polymers, wherein

said mixture optionally also comprises a compound of formula (I) wherein n is equal to zero.

40. The composition according to claim 1, wherein said at least one structuring polymer has a softening point greater than 50°C.

41. The composition according to claim 40, wherein said at least one structuring polymer has a softening point ranging from 65°C to 190°C.

42. The composition according to claim 41, wherein said at least one structuring polymer has a softening point ranging from 70°C to 130°C.

43. The composition according to claim 42, wherein said at least one structuring polymer has a softening point ranging from 80°C to 105°C.

44. The composition according to claim 1, wherein said at least one structuring polymer is present in the composition in an amount ranging from 0.5% to 80% by weight relative to the total weight of the composition.

45. The composition according to claim 44, wherein said at least one structuring polymer is present in the composition in an amount ranging from 2% to 60% by weight relative to the total weight of the composition.

46. The composition according to claim 45, wherein said at least one structuring polymer is present in the composition in an amount ranging from 5% to 40% by weight relative to the total weight of the composition.

47. The composition according to claim 1, wherein said composition has a hardness ranging from 30 to 300 g.

48. The composition according to claim 47, wherein said composition has a hardness ranging from 30 to 250 g.

49. The composition according to claim 48, wherein said composition has a hardness ranging from 30 to 200 g.

50. The composition according to claim 1, wherein said at least one liquid fatty phase of the composition comprises at least one oil.

51. The composition according to claim 50, wherein said at least one oil is chosen from at least one polar oil and at least one apolar oil.

52. The composition according to claim 51, wherein said at least one polar oil is chosen from:

- hydrocarbon-based plant oils with a high content of triglycerides comprising fatty acid esters of glycerol in which the fatty acids comprise chains having from 4 to 24 carbon atoms, said chains optionally being chosen from linear and branched, and saturated and unsaturated chains;
- synthetic oils or esters of formula R_5COOR_6 in which R_5 is chosen from linear and branched fatty acid residues comprising from 1 to 40 carbon atoms and $R_5 + R_6 \geq 10$;
- synthetic ethers containing from 10 to 40 carbon atoms;
- C_8 to C_{26} fatty alcohols; and
- C_8 to C_{26} fatty acids.

53. The composition according to claim 51, wherein said at least one apolar oil is chosen from:

- silicone oils chosen from volatile and non-volatile, linear and cyclic polydimethylsiloxanes that are liquid at room temperature;
- polydimethylsiloxanes comprising alkyl or alkoxy groups which are pendant and/or at the end of the silicone chain, the groups each containing from 2 to 24 carbon atoms;
- phenylsilicones; and
- hydrocarbons chosen from linear and branched, volatile and non-volatile hydrocarbons of synthetic and mineral origin;

54. The composition according to claim 1, wherein said at least one liquid fatty phase comprises at least one non-volatile oil.

55. The composition according to claim 54, wherein said at least one non-volatile oil is chosen from hydrocarbon-based oils of mineral, plant and synthetic origin, synthetic esters and ethers, and silicone oils.

56. The composition according to claim 1, wherein said at least one liquid fatty phase is present in an amount ranging from 1% to 99% by weight relative to the total weight of the composition.

57. The composition according to claim 56, wherein said at least one liquid fatty phase is present in an amount ranging from 5% to 95.5% by weight relative to the total weight of the composition.

58. The composition according to claim 57, wherein said at least one liquid fatty phase is present in an amount ranging from 10% to 80% by weight relative to the total weight of the composition.

59. The composition according to claim 58, wherein said at least one liquid fatty phase is present in an amount ranging from 20% to 75% by weight relative to the total weight of the composition.

60. The composition according to claim 1, wherein said at least one liquid fatty phase comprises at least one volatile solvent chosen from hydrocarbon-based solvents and silicone solvents optionally comprising alkyl or alkoxy groups that are pendant or at the end of a silicone chain.

61. The composition according to claim 60, wherein said at least one volatile solvent is present in an amount up to 95.5% relative to the total weight of the composition.

62. The composition according to claim 61, wherein said at least one volatile solvent is present in an amount ranging from 2% to 75% relative to the total weight of the composition.

63. The composition according to claim 62, wherein said at least one volatile solvent is present in an amount ranging from 10% to 45% relative to the total weight of the composition.

64. The composition according to claim 1, wherein said composition further comprises at least one additional fatty material.

65. The composition according to claim 64, wherein said at least one additional fatty material is chosen from gums, fatty materials pasty at ambient temperature, and resins.

66. The composition according to claim 1, wherein said at least one solid substance has a melting point of about 50°C or greater.

67. The composition according to claim 66, wherein said at least one solid substance has a melting point ranging from about 50°C to about 150°C.

68. The composition according to claim 67, wherein said at least one solid substance has a melting point ranging from about 60°C to about 130°C.

69. The composition according to claim 1, wherein said at least one solid substance comprises at least one crystallizable portion.

70. The composition according to claim 1, wherein said at least one solid substance is chosen from waxes, fillers, glitters, and solid polymers.

71. The composition according to claim 70, wherein said waxes are chosen from carnauba wax, candellila wax, candelilla wax, ouricury wax, Japan wax, cork fiber wax, sugar cane wax, lignite wax, microcrystalline waxes, lanolin wax, montan wax, polyethylene waxes, waxes obtained by Fischer-Tropsch synthesis, and silicone waxes.

72. The composition according to claim 71, wherein said waxes are chosen from ozokerites, hydrogenated jojoba oil, fatty acid esters and fatty acid ester glycerides.

73. The composition according to claim 1, wherein said at least one solid substance is present at a concentration of at least 5% relative to the total weight of said composition.

74. The composition according to claim 73, wherein said at least one solid substance is present at a concentration ranging from 10% to 70% relative to the total weight of the composition.

75. The composition according to claim 74, wherein said at least one solid substance is present at a concentration ranging from 10% to 50% relative to the total weight of the composition.

76. The composition according to claim 1, wherein the composition is in a form chosen from a fluid anhydrous gel, rigid anhydrous gel, fluid

simple emulsion, rigid simple emulsion, fluid multiple emulsion, and rigid multiple emulsion.

77. The composition according to claim 1, wherein said composition is a solid.

78. The composition according to claim 77, wherein said composition is a solid chosen from molded and poured sticks.

79. The composition according to claim 1, wherein said composition is anhydrous.

80. A composition comprising at least one liquid fatty phase which comprises:

(i) at least one structuring polymer, wherein said at least one structuring polymer is at least one polyamide polymer comprising:
a polymer skeleton which comprises at least one amide repeating unit;
and

(ii) at least one solid substance that has a melting point of about 45°C or greater,

wherein said at least one solid substance is not stearalkonium hectorite, silica, talc or paraffin wax.

81. The composition according to claim 80, wherein said at least one polyamide polymer further comprises at least one of:

at least one terminal fatty chain chosen from alkyl chains and alkenyl chains, wherein said at least one terminal fatty chain is bonded to said polymer skeleton via at least one linking group; and

at least one pendant fatty chain chosen from alkyl chains and alkenyl chains, wherein said at least one pendant fatty chain is bonded to said polymer skeleton via at least one linking group.

82. The composition according to claim 81, wherein said alkyl chains and said alkenyl chains each comprise at least four carbon atoms.

83. The composition according to claim 82, wherein said alkyl chains and said alkenyl chains each comprise from 8 to 120 carbon atoms.

84. The composition according to claim 83, wherein said alkyl chains and said alkenyl chains each comprise from 12 to 68 carbon atoms.

85. The composition according to claim 81, wherein said at least one linking group is chosen from single bonds and urea, urethane, thiourea, thiourethane, thioether, thioester, ester, ether and amine groups.

86. The composition according to claim 85, wherein said at least one linking group is an ester group present in a proportion ranging from 15% to 40% of the total number of all ester and amide groups in the at least one polyamide polymer.

87. The composition according to claim 86, wherein said at least one linking group is an ester group present in a proportion ranging from 20% to 35% of the total number of all ester and amide groups in the at least one polyamide polymer.

88. The composition according to claim 81, wherein said at least one terminal fatty chain is functionalized.

89. The composition according to claim 81, wherein said at least one pendant fatty chain is functionalized.

90. The composition according to claim 81, wherein in said at least one polyamide polymer, the percentage of the total number of fatty chains ranges from 40% to 98% relative to the total number of all amide units and fatty chains in the at least one polyamide polymer.

91. The composition according to claim 90, wherein in said at least one polyamide polymer, the percentage of the total number of fatty chains ranges from 50% to 95% relative to the total number of all amide units and fatty chains in the at least one polyamide polymer.

92. The composition according to claim 80, wherein said at least one polyamide polymer has a weight-average molecular mass of less than 100,000.

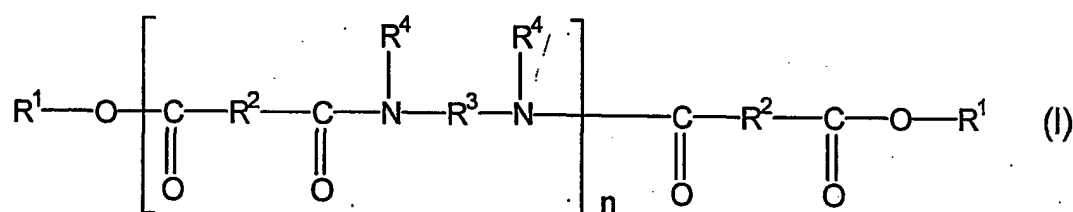
93. The composition according to claim 92, wherein said at least one polyamide polymer has a weight-average molecular mass of less than 50,000.

94. The composition according to claim 93, wherein said at least one polyamide polymer has a weight-average molecular mass ranging from 1000 to 30,000.

95. The composition according to claim 94, wherein said at least one polyamide polymer has a weight-average molecular mass ranging from 2000 to 20,000.

96. The composition according to claim 95, wherein said at least one polyamide polymer has a weight-average molecular mass ranging from 2000 to 10,000.

97. The composition according to claim 80, wherein said at least one polyamide polymer is chosen from polyamide polymers of formula (I):



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one polyamide polymer ranges from 10% to 50% of the total number of all ester groups and all amide groups comprised in said at least one polyamide polymer;
- R¹, which are identical or different, are each chosen from alkyl groups comprising at least 4 carbon atoms and alkenyl groups comprising at least 4 carbon atoms;
- R², which are identical or different, are each chosen from C₄ to C₄₂ hydrocarbon-based groups with the proviso that at least 50% of all R² are chosen from C₃₀ to C₄₂ hydrocarbon-based groups;
- R³, which are identical or different, are each chosen from organic groups comprising atoms chosen from carbon atoms, hydrogen atoms, oxygen atoms

and nitrogen atoms with the proviso that R^3 comprises at least 2 carbon atoms; and

- R^4 , which are identical or different, are each chosen from hydrogen atoms, C_1 to C_{10} alkyl groups and a direct bond to at least one group chosen from R^3 and another R^4 such that when said at least one group is chosen from another R^4 , the nitrogen atom to which both R^3 and R^4 are bonded forms part of a heterocyclic structure defined in part by R^4-N-R^3 , with the proviso that at least 50% of all R^4 are chosen from hydrogen atoms.

98. The composition according to claim 97, wherein in said formula (I), n is an integer ranging from 1 to 5.

99. The composition according to claim 98, wherein in said formula (I), n is an integer ranging from 3 to 5.

100. The composition according to claim 97, wherein in said formula (I), said alkyl groups of R^1 and said alkenyl groups of R^1 each independently comprise from 4 to 24 carbon atoms.

101. The composition according to claim 100, wherein in said formula (I), R^1 , which are identical or different, are each chosen from C_{12} to C_{22} alkyl groups.

102. The composition according to claim 101, wherein in said formula (I), R^1 , which are identical or different, are each chosen from C_{16} to C_{22} alkyl groups.

103. The composition according to claim 97, wherein in said formula (I), R^2 , which are identical or different, are each chosen from C_{10} to C_{42} hydrocarbon based groups with the proviso that at least 50% of all R^2 are chosen from C_{30} to C_{42} hydrocarbon based groups.

104. The composition according to claim 103, wherein at least 75 of all R^2 , which are identical or different, are chosen from C_{30} to C_{42} hydrocarbon based groups.

105. The composition according to claim 97, wherein in said formula (I), R^3 , which can be identical or different, are each chosen from C_2 to C_{36} hydrocarbon-based groups and polyoxyalkylene groups.

106. The composition according to claim 105, wherein R^3 , which can be identical or different, are each chosen from C_2 to C_{12} hydrocarbon-based groups.

107. The composition according to claim 97, wherein in said formula (I), R^4 , which can be identical or different, are each chosen from hydrogen atoms.

108. The composition according to claim 97, wherein said at least one polymer of formula (I) is in the form of a mixture of polymers, wherein said mixture optionally also comprises a compound of formula (I) wherein n is equal to zero.

109. The composition according to claim 80, wherein said at least one polyamide polymer is chosen from polymers resulting from at least one polycondensation reaction between at least one dicarboxylic acid comprising at least 32 carbon atoms and at least one amine chosen from diamines comprising at least 2 carbon atoms and triamines comprising at least 2 carbon atoms.

110. The composition according to claim 109, wherein said at least one dicarboxylic acid comprises from 32 to 44 carbon atoms and said at least one amine comprises from 2 to 36 carbon atoms.

111. The composition according to claim 110, wherein said at least one dicarboxylic acid is chosen from dimers of at least one fatty acid comprising at least 16 carbon atoms.

112. The composition according to claim 111, wherein said at least one fatty acid is chosen from oleic acid, linoleic acid and linolenic acid.

113. The composition according to claim 109, wherein said at least one amine is chosen from ethylenediamine, hexylenediamine, hexamethylenediamine, phenylenediamine and ethylenetriamine.

114. The composition according to claim 80, wherein said at least one polyamide polymer is chosen from polymers comprising at least one terminal carboxylic acid group.

115. The composition according to claim 114, wherein said at least one terminal carboxylic acid group is esterified with at least one alcohol chosen from monoalcohols comprising at least 4 carbon atoms.

116. The composition according to claim 80, wherein said at least one polyamide polymer is chosen from:

- polymers chosen from mixtures of copolymers derived from monomers of (i) C₃₆ diacids and (ii) ethylenediamine, and having a weight-average molecular mass of about 6000;
- polyamide polymers resulting from the condensation of at least one aliphatic dicarboxylic acid and at least one diamine, the carbonyl and amine groups being condensed via an amide bond; and
- polyamide resins from vegetable sources.

117. The composition according to claim 80, wherein said at least one polyamide polymer has a softening point greater than 50°C.

118. The composition according to claim 117, wherein said at least one polyamide polymer has a softening point ranging from 65°C to 190°C.

119. The composition according to claim 118, wherein said at least one polyamide polymer has a softening point ranging from 70°C to 130°C.

120. The composition according to claim 119, wherein said at least one polyamide polymer has a softening point ranging from 80°C to 105°C.

121. The composition according to claim 80, wherein said at least one polyamide polymer is present in the composition in an amount ranging from 0.5% to 80% by weight relative to the total weight of the composition.

122. The composition according to claim 121, wherein said at least one polyamide polymer is present in the composition in an amount ranging from 2% to 60% by weight relative to the total weight of the composition.

123. The composition according to claim 122, wherein said at least one polyamide polymer is present in the composition in an amount ranging from 5% to 40% by weight relative to the total weight of the composition.

124. The composition according to claim 80, wherein said composition has a hardness ranging from 30 to 300 g.

125. The composition according to claim 124, wherein said composition has a hardness ranging from 30 to 250 g.

126. The composition according to claim 125, wherein said composition has a hardness ranging from 30 to 200 g.

127. The composition according to claim 80, wherein said at least one liquid fatty phase of the composition comprises at least one oil.

128. The composition according to claim 127, wherein said at least one oil is chosen from at least one polar oil and at least one apolar oil.

129. The composition according to claim 128, wherein said at least one polar oil is chosen from:

- hydrocarbon-based plant oils with a high content of triglycerides comprising fatty acid esters of glycerol in which the fatty acids comprise chains having from 4 to 24 carbon atoms, said chains optionally being chosen from linear and branched, and saturated and unsaturated chains;
- synthetic oils or esters of formula R_5COOR_6 in which R_5 is chosen from linear and branched fatty acid residues comprising from 1 to 40 carbon atoms and $R_5 + R_6 \geq 10$;
- synthetic ethers containing from 10 to 40 carbon atoms;
- C_8 to C_{26} fatty alcohols; and
- C_8 to C_{26} fatty acids.

130. The composition according to claim 128, wherein said at least one apolar oil is chosen from:

- silicone oils chosen from volatile and non-volatile, linear and cyclic polydimethylsiloxanes that are liquid at room temperature;

- polydimethylsiloxanes comprising alkyl or alkoxy groups which are pendant and/or at the end of the silicone chain, the groups each containing from 2 to 24 carbon atoms;
- phenylsilicones; and
- hydrocarbons chosen from linear and branched, volatile and non-volatile hydrocarbons of synthetic and mineral origin.

131. The composition according to claim 80, wherein said at least one liquid fatty phase comprises at least one non-volatile oil.

132. The composition according to claim 131, wherein said at least one non-volatile oil is chosen from hydrocarbon-based oils of mineral, plant and synthetic origin, synthetic esters and ethers, and silicone oils.

133. The composition according to claim 132, wherein said at least one liquid fatty phase is present in an amount ranging from 1% to 99% by weight relative to the total weight of the composition.

134. The composition according to claim 133, wherein said at least one liquid fatty phase is present in an amount ranging from 5% to 95.5% by weight relative to the total weight of the composition.

135. The composition according to claim 134, wherein said at least one liquid fatty phase is present in an amount ranging from 10% to 80% by weight relative to the total weight of the composition.

136. The composition according to claim 135, wherein said at least one liquid fatty phase is present in an amount ranging from 20% to 75% by weight relative to the total weight of the composition.

137. The composition according to claim 80, wherein said at least one liquid fatty phase comprises at least one volatile solvent chosen from hydrocarbon-based solvents and silicone solvents optionally comprising alkyl or alkoxy groups that are pendant or at the end of a silicone chain.

138. The composition according to claim 137, wherein said at least one volatile solvent is present in an amount up to 95.5% relative to the total weight of the composition.

139. The composition according to claim 138, wherein said at least one volatile solvent is present in an amount ranging from 2% to 75% relative to the total weight of the composition.

140. The composition according to claim 139, wherein said at least one volatile solvent is present in an amount ranging from 10% to 45% relative to the total weight of the composition.

141. The composition according to claim 80, wherein said composition further comprises at least one additional fatty material.

142. The composition according to claim 141, wherein said at least one additional fatty material is chosen from gums, fatty materials pasty at ambient temperature, and resins.

143. The composition according to claim 80, wherein said at least one solid substance has a melting point of about 50°C or greater.

144. The composition according to claim 143, wherein said at least one solid substance has a melting point ranging from about 50°C to about 150°C.

145. The composition according to claim 144, wherein said at least one solid substance has a melting point ranging from about 60°C to about 130°C.

146. The composition according to claim 145, wherein said at least one solid substance comprises at least one crystallizable portion.

147. The composition according to claim 80, wherein said at least one solid substance is chosen from waxes, fillers, glitters, and solid polymers.

148. The composition according to claim 147, wherein said waxes are chosen from carnauba wax, candellila wax, candelilla wax, ouricury wax, Japan wax, cork-fiber wax, sugar cane wax, lignite wax, microcrystalline waxes, lanolin wax, montan wax, polyethylene waxes, waxes obtained by Fischer-Tropsch synthesis, and silicone waxes.

149. The composition according to claim 147, wherein said waxes are chosen from ozokerites, hydrogenated jojoba oil, fatty acid esters and fatty acid ester glycerides.

150. The composition according to claim 80, wherein said at least one solid substance is present at a concentration of at least 5% relative to the total weight of said composition.

151. The composition according to claim 150, wherein said at least one solid substance is present at a concentration ranging from 10% to 70% relative to the total weight of the composition.

152. The composition according to claim 151, wherein said at least one solid substance is present at a concentration ranging from 10% to 50% relative to the total weight of the composition.

153. The composition according to claim 80, wherein the composition is in a form chosen from a fluid anhydrous gel, rigid anhydrous gel, fluid simple emulsion, rigid simple emulsion, fluid multiple emulsion, and rigid multiple emulsion.

154. The composition according to claim 80, wherein said composition is a solid.

155. The composition according to claim 154, wherein said composition is a solid chosen from molded and poured sticks.

156. The composition according to claim 80, wherein said composition is anhydrous.

157. An anhydrous composition comprising at least one liquid fatty phase which comprises:

(i) at least one structuring polymer comprising:

a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one hetero atom; and

(ii) at least one solid substance that has a melting point of about 45°C or greater,

wherein said at least one solid substance is not stearalkonium hectorite.

158. The anhydrous composition according to claim 157, wherein said at least one structuring polymer further comprises at least one of:

at least one terminal fatty chain chosen from alkyl chains and alkenyl chains, wherein said at least one terminal fatty chain is bonded to said polymer skeleton via at least one linking group; and

at least one pendant fatty chain chosen from alkyl chains and alkenyl chains, wherein said at least one pendant fatty chain is bonded to said polymer skeleton via at least one linking group.

159. The anhydrous composition according to claim 158, wherein said alkyl chains and said alkenyl chains each comprise at least four carbon atoms.

160. The anhydrous composition according to claim 159, wherein said alkyl chains and said alkenyl chains each comprise from 8 to 120 carbon atoms.

161. The anhydrous composition according to claim 160, wherein said alkyl chains and said alkenyl chains each comprise from 12 to 68 carbon atoms.

162. The anhydrous composition according to claim 158, wherein said at least one linking group is chosen from single bonds and urea, urethane, thiourea, thiourethane, thioether, thioester, ester, ether and amine groups.

163. The anhydrous composition according to claim 162, wherein said at least one linking group is an ester group present in a proportion ranging from 15% to 40% of the total number of all ester and hetero atom groups in the at least one structuring polymer.

164. The anhydrous composition according to claim 163, wherein said at least one linking group is an ester group present in a proportion ranging from 20% to 35% of the total number of all ester and hetero atom groups in the at least one structuring polymer.

165. The anhydrous composition according to claim 158, wherein said at least one terminal fatty chain is functionalized.

166. The anhydrous composition according to claim 158, wherein said at least one pendant fatty chain is functionalized.

167. The anhydrous composition according to claim 158, wherein in said at least one structuring polymer, the percentage of the total number of fatty chains ranges from 40% to 98% relative to the total number of all repeating units and fatty chains in the at least one structuring polymer.

168. The anhydrous composition according to claim 167, wherein in said at least one structuring polymer, the percentage of the total number of fatty chains ranges from 50% to 95% relative to the total number of all repeating units and fatty chains in the at least one structuring polymer.

169. The anhydrous composition according to claim 157, wherein said at least one structuring polymer has a weight-average molecular mass of less than 100,000.

170. The anhydrous composition according to claim 169, wherein said at least one structuring polymer has a weight-average molecular mass of less than 50,000.

171. The anhydrous composition according to claim 170, wherein said at least one structuring polymer has a weight-average molecular mass ranging from 1000 to 30,000.

172. The anhydrous composition according to claim 171, wherein said at least one structuring polymer has a weight-average molecular mass ranging from 2000 to 20,000.

173. The anhydrous composition according to claim 172, wherein said at least one structuring polymer has a weight-average molecular mass ranging from 2000 to 10,000.

174. The anhydrous composition according to claim 157, wherein said at least one hydrocarbon based repeating unit comprises from 2 to 80 carbon atoms.

175. The anhydrous composition according to claim 174, wherein said at least one hydrocarbon based repeating unit comprises from 2 to 60 carbon atoms.

176. The anhydrous composition according to claim 157, wherein said at least one hydrocarbon based repeating unit is chosen from saturated and unsaturated hydrocarbon-based units which are chosen from linear hydrocarbon-based repeating units, branched hydrocarbon-based repeating units and cyclic hydrocarbon-based repeating units.

177. The anhydrous composition according to claim 157, wherein said at least one hetero atom of said at least one hydrocarbon-based repeating unit is chosen from nitrogen, sulphur, and phosphorus.

178. The anhydrous composition according to claim 177, wherein said at least one hetero atom is a nitrogen atom.

179. The anhydrous composition according to claim 177, wherein said at least one hetero atom is combined with at least one atom chosen from oxygen and carbon to form a hetero atom group.

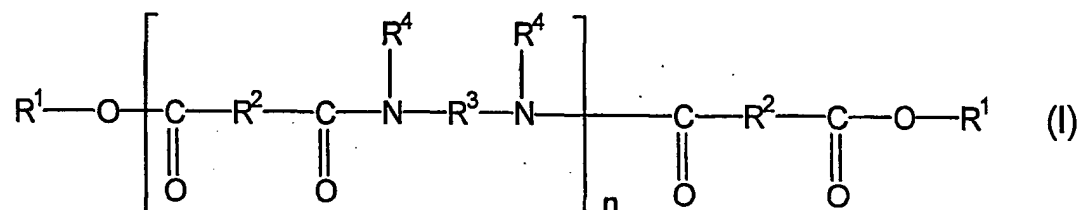
180. The anhydrous composition according to claim 179, wherein said at least one hetero atom group further comprises a carbonyl group.

181. The anhydrous composition according to claim 179, wherein said at least one hetero atom group is chosen from amide groups, carbamate groups, and urea groups.

182. The anhydrous composition according to claim 181, wherein said at least one hetero atom group is an amide group and said polymer skeleton is a polyamide skeleton.

183. The anhydrous composition according to claim 181, wherein said at least one hetero atom group is chosen from carbamate groups and urea groups and said polymer skeleton is chosen from a polyurethane skeleton, a polyurea skeleton and a polyurethane-polyurea skeleton.

184. The anhydrous composition according to claim 157, wherein said at least one structuring polymer is chosen from polyamide polymers of formula (I):



in which:

- n is an integer which represents the number of amide units such that the number of ester groups present in said at least one polyamide polymer ranges from 10% to 50% of the total number of all ester groups and all amide groups comprised in said at least one polyamide polymer;
- R¹, which are identical or different, are each chosen from alkyl groups comprising at least 4 carbon atoms and alkenyl groups comprising at least 4 carbon atoms;
- R², which are identical or different, are each chosen from C₄ to C₄₂ hydrocarbon-based groups with the proviso that at least 50% of all R² are chosen from C₃₀ to C₄₂ hydrocarbon-based groups;
- R³, which are identical or different, are each chosen from organic groups comprising atoms chosen from carbon atoms, hydrogen atoms, oxygen atoms and nitrogen atoms with the proviso that R³ comprises at least 2 carbon atoms; and
- R⁴, which are identical or different, are each chosen from hydrogen atoms, C₁ to C₁₀ alkyl groups and a direct bond to at least one group chosen from R³ and another R⁴ such that when said at least one group is chosen from another R⁴, the nitrogen atom to which both R³ and R⁴ are bonded forms part of a heterocyclic structure defined in part by R⁴-N-R³, with the proviso that at least 50% of all R⁴ are chosen from hydrogen atoms.

185. The anhydrous composition according to claim 184, wherein in said formula (I), n is an integer ranging from 1 to 5.

186. The anhydrous composition according to claim 185, wherein in said formula (I), n is an integer ranging from 3 to 5.

187. The anhydrous composition according to claim 184, wherein in said formula (I), said alkyl groups of R^1 and said alkenyl groups of R^1 each independently comprise from 4 to 24 carbon atoms.

188. The anhydrous composition according to claim 187, wherein in said formula (I), R^1 , which are identical or different, are each chosen from C_{12} to C_{22} alkyl groups.

189. The anhydrous composition according to claim 188, wherein in said formula (I), R^1 , which are identical or different, are each chosen from C_{16} to C_{22} alkyl groups.

190. The anhydrous composition according to claim 184, wherein in said formula (I), R^2 , which are identical or different, are each chosen from C_{10} to C_{42} hydrocarbon based groups with the proviso that at least 50% of all R^2 are chosen from C_{30} to C_{42} hydrocarbon based groups.

191. The anhydrous composition according to claim 190, wherein at least 75% of all R^2 , which are identical or different, are chosen from C_{30} to C_{42} hydrocarbon based groups.

192. The anhydrous composition according to claim 184, wherein in said formula (I), R^3 , which can be identical or different, are each chosen from C_2 to C_{36} hydrocarbon-based groups and polyoxyalkylene groups.

193. The anhydrous composition according to claim 192, wherein R^3 , which can be identical or different, are each chosen from C_2 to C_{12} hydrocarbon-based groups.

194. The anhydrous composition according to claim 184, wherein in said formula (I), R^4 , which can be identical or different, are each chosen from hydrogen atoms.

195. The anhydrous composition according to claim 194, wherein said at least one polymer of formula (I) is in the form of a mixture of polymers, wherein said mixture optionally also comprises a compound of formula (I) wherein n is equal to zero.

196. The anhydrous composition according to claim 157, wherein said at least one structuring polymer has a softening point greater than 50°C.

197. The anhydrous composition according to claim 196, wherein said at least one structuring polymer has a softening point ranging from 65°C to 190°C.

198. The anhydrous composition according to claim 197, wherein said at least one structuring polymer has a softening point ranging from 70°C to 130°C.

199. The anhydrous composition according to claim 198, wherein said at least one structuring polymer has a softening point ranging from 80°C to 105°C.

200. The anhydrous composition according to claim 157, wherein said at least one structuring polymer is present in the composition in an amount ranging from 0.5% to 80% by weight relative to the total weight of the composition.

201. The anhydrous composition according to claim 200, wherein said at least one structuring polymer is present in the composition in an amount ranging from 2% to 60% by weight relative to the total weight of the composition.

202. The anhydrous composition according to claim 201, wherein said at least one structuring polymer is present in the composition in an amount ranging from 5% to 40% by weight relative to the total weight of the composition.

203. The anhydrous composition according to claim 157, wherein said composition has a hardness ranging from 30 to 300 g.

204. The anhydrous composition according to claim 203, wherein said composition has a hardness ranging from 30 to 250 g.

205. The anhydrous composition according to claim 204, wherein said composition has a hardness ranging from 30 to 200 g.

206. The anhydrous composition according to claim 157, wherein said at least one liquid fatty phase of the composition comprises at least one oil.

207. The anhydrous composition according to claim 206, wherein said at least one oil is chosen from at least one polar oil and at least one apolar oil.

208. The anhydrous composition according to claim 207, wherein said at least one polar oil is chosen from:

- hydrocarbon-based plant oils with a high content of triglycerides comprising fatty acid esters of glycerol in which the fatty acids comprise chains having from 4 to 24 carbon atoms, said chains optionally being chosen from linear and branched, and saturated and unsaturated chains;
- synthetic oils or esters of formula R_5COOR_6 in which R_5 is chosen from linear and branched fatty acid residues comprising from 1 to 40 carbon atoms and $R_5 + R_6 \geq 10$;
- synthetic ethers containing from 10 to 40 carbon atoms;
- C_8 to C_{26} fatty alcohols; and
- C_8 to C_{26} fatty acids.

209. The anhydrous composition according to claim 207, wherein said at least one apolar oil is chosen from:

- silicone oils chosen from volatile and non-volatile, linear and cyclic polydimethylsiloxanes that are liquid at room temperature;
- polydimethylsiloxanes comprising alkyl or alkoxy groups which are pendant and/or at the end of the silicone chain, the groups each containing from 2 to 24 carbon atoms;
- phenylsilicones; and

- hydrocarbons chosen from linear and branched, volatile and non-volatile hydrocarbons of synthetic and mineral origin.

210. The anhydrous composition according to claim 157, wherein said at least one liquid fatty phase comprises at least one non-volatile oil.

211. The anhydrous composition according to claim 210, wherein said at least one non-volatile oil is chosen from hydrocarbon-based oils of mineral, plant and synthetic origin, synthetic esters and ethers, and silicone oils.

212. The anhydrous composition according to claim 157, wherein said at least one liquid fatty phase is present in an amount ranging from 1% to 99% by weight relative to the total weight of the composition.

213. The anhydrous composition according to claim 212, wherein said at least one liquid fatty phase is present in an amount ranging from 5% to 95.5% by weight relative to the total weight of the composition.

214. The anhydrous composition according to claim 213, wherein said at least one liquid fatty phase is present in an amount ranging from 10% to 80% by weight relative to the total weight of the composition.

215. The anhydrous composition according to claim 214, wherein said at least one liquid fatty phase is present in an amount ranging from 20% to 75% by weight relative to the total weight of the composition.

216. The anhydrous composition according to claim 157, wherein said at least one liquid fatty phase comprises at least one volatile solvent chosen from hydrocarbon-based solvents and silicone solvents optionally comprising alkyl or alkoxy groups that are pendant or at the end of a silicone chain.

217. The anhydrous composition according to claim 216, wherein said at least one volatile solvent is present in an amount up to 95.5% relative to the total weight of the composition.

218. The anhydrous composition according to claim 217, wherein said at least one volatile solvent is present in an amount ranging from 2% to 75% relative to the total weight of the composition.

219. The anhydrous composition according to claim 218, wherein said at least one volatile solvent is present in an amount ranging from 10% to 45% relative to the total weight of the composition.

220. The anhydrous composition according to claim 157, wherein said composition further comprises at least one additional fatty material.

221. The anhydrous composition according to claim 220, wherein said at least one additional fatty material is chosen from gums, fatty materials pasty at ambient temperature, and resins.

222. The anhydrous composition according to claim 157, wherein said at least one solid substance has a melting point of about 50°C or greater.

223. The anhydrous composition according to claim 222, wherein said at least one solid substance has a melting point ranging from about 50°C to about 150°C.

224. The anhydrous composition according to claim 223, wherein said at least one solid substance has a melting point ranging from about 60°C to about 130°C.

225. The anhydrous composition according to claim 157, wherein said at least one solid substance comprises at least one crystallizable portion.

226. The anhydrous composition according to claim 157, wherein said at least one solid substance is chosen from waxes, fillers, glitters, and solid polymers.

227. The anhydrous composition according to claim 226, wherein said waxes are chosen from carnauba wax, candellila wax, candelilla wax, ouricury wax, Japan wax, cork fiber wax, sugar cane wax, lignite wax, microcrystalline waxes, lanolin wax, montan wax, polyethylene waxes, waxes obtained by Fischer-Tropsch synthesis, and silicone waxes.

228. The anhydrous composition according to claim 226, wherein said waxes are chosen from ozokerites, hydrogenated jojoba oil, fatty acid esters and fatty acid ester glycerides.

229. The anhydrous composition according to claim 157, wherein said at least one solid substance is present at concentration of at least 5% relative to the total weight of said composition.

230. The anhydrous composition according to claim 229, wherein said at least one solid substance is present at a concentration ranging from 10% to 70% relative to the total weight of the composition.

231. The anhydrous composition according to claim 230, wherein said at least one solid substance is present at a concentration ranging from 10% to 50% relative to the total weight of the composition.

232. The anhydrous composition according to claim 157, wherein the composition is in a form chosen from a fluid anhydrous gel, rigid anhydrous gel, fluid simple emulsion, rigid simple emulsion, fluid multiple emulsion, and rigid multiple emulsion.

233. The anhydrous composition according to claim 157, wherein said composition is a solid.

234. The anhydrous composition according to claim 233, wherein said composition is a solid chosen from molded and poured sticks.

235. A composition comprising at least one liquid fatty phase which comprises:

(i) at least one structuring polymer comprising

a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one hetero atom with the proviso that said at least one hetero atom is not nitrogen; and

(ii) at least one solid substance that has a melting point of about 45°C or greater.

236. A mascara, an eyeliner, a foundation, a lipstick, a blusher, a make-up-removing product, a make-up product for the body, an eyeshadow,

a face powder, a concealer product, a shampoo, a conditioner, an antisen product or a care product for the skin, lips or hair comprising a composition comprising at least one liquid fatty phase in said mascara, eyeliner, foundation, lipstick, blusher, make-up-removing product, make-up product for the body, eyeshadow, face powder, concealer product, shampoo, conditioner, antisen product or care product for the skin, lips or hair which comprises:

(i) at least one structuring polymer comprising:

a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one hetero atom; and

(ii) at least one solid substance that has a melting point of about 45°C or greater.

237. The composition according to claim 236, wherein said composition is a solid.

238. An anhydrous deodorant comprising:

at least one liquid fatty phase which comprises:

(i) at least one structuring polymer comprising:

a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one hetero atom; and

(ii) at least one solid substance that has a melting point of about 45°C or greater.

239. The composition according to claim 238, wherein said composition is a solid.

240. A make-up and/or care and/or treatment composition for keratinous fibers comprising:

at least one liquid fatty phase which comprises:

(i) at least one structuring polymer comprising:

a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one hetero atom; and

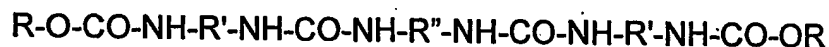
(ii) at least one solid substance that has a melting point of about 45°C or greater.

241. A lipstick composition in stick form comprising at least one continuous liquid fatty phase, at least one solid substance that has a melting

point of about 45°C or greater, and at least one non-waxy structuring polymer having a weight-average molecular mass of less than 100,000, said at least one continuous liquid fatty phase, said at least one solid substance, and said at least one non-waxy structuring polymer being present in said lipstick composition.

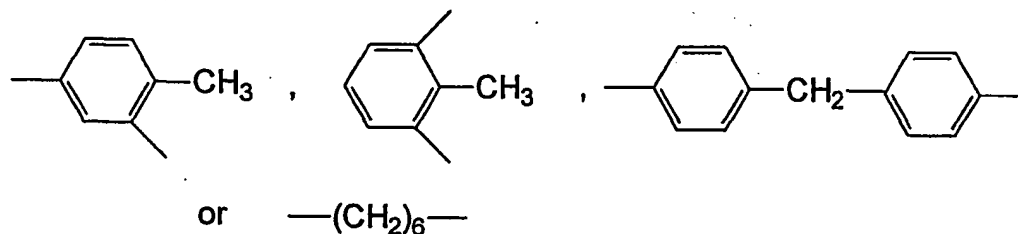
242. A composition comprising at least one liquid fatty phase which comprises:

(i) at least one structuring polymer chosen from urea urethanes having the following formula:

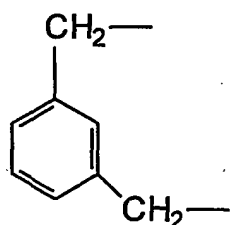
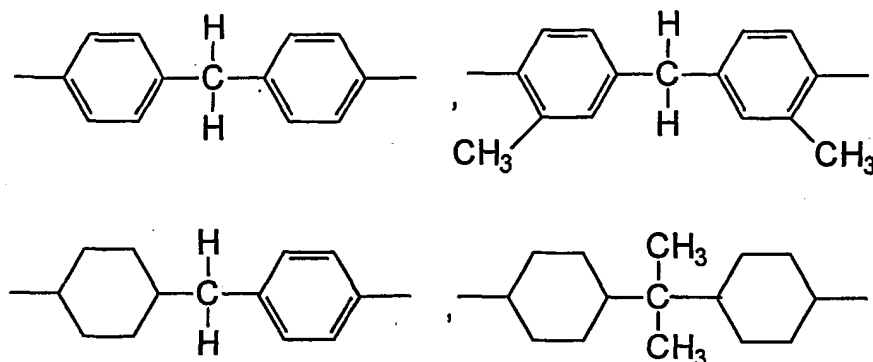


wherein R represents $C_nH_{2n+1}-$, wherein n represents an integer having a value greater than 22 or $C_mH_{2m+1}(OC_pH_{2p/r})-$, wherein m represents an integer having a value of greater than 18, p represents an integer having a value of from 2 to 4, and r represents an integer having a value of from 1 to 10.

R' represents:



and R'' represents:



(ii) at least one solid substance that has a melting point of about 45°C or greater.

243. A composition comprising at least one liquid fatty phase which comprises:

(i) at least one structuring polymer comprising:

a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one hetero atom; and

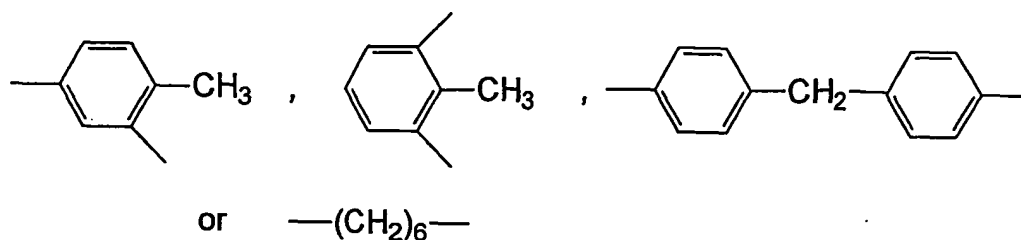
(ii) at least one solid substance that has a melting point of about 45°C or greater,

wherein said at least one structuring polymer does not include

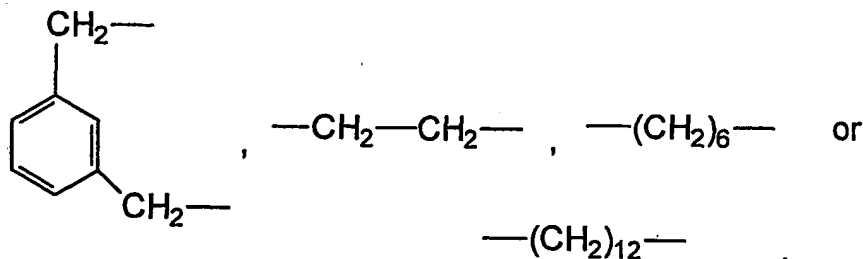
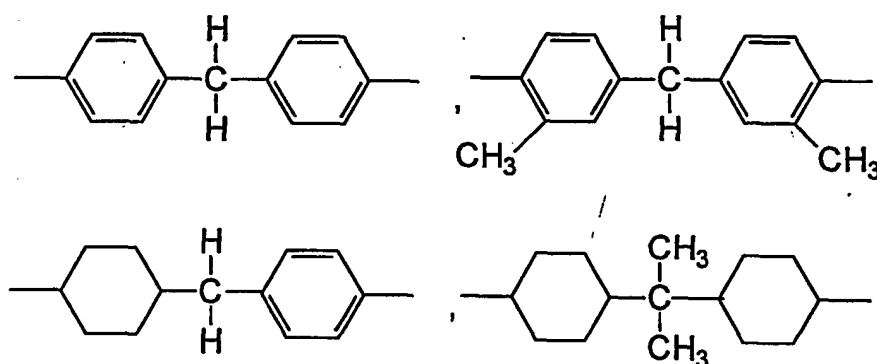


wherein R represents $\text{C}_n\text{H}_{2n+1}-$ or $\text{C}_m\text{H}_{2m+1}(\text{C}_p\text{H}_{2p}\text{O})_r-$; n represents an integer having a value of from 4 to 22; m represents an integer having a value of from 1 to 18; p represents an integer having a value of from 2 to 4; and r represents an integer having a value of from 1 to 10;

R' represents:



and R'' represents:



244. A make up, care, or treatment composition for the skin or lips comprising a structured composition comprising at least one liquid fatty phase structured with at least one structuring polymer comprising a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one hetero atom, at least one solid substance that has a melting point of about 45°C or greater, and at least one coloring agent.

245. A treatment, care or make-up composition for keratinous fibers comprising a structured composition containing at least one liquid fatty phase structured with at least one structuring polymer comprising a polymer skeleton

comprising at least one hydrocarbon-based repeating unit comprising at least one hetero atom, at least one solid substance that has a melting point of about 45°C or greater, and at least one coloring agent.

246. A structured composition comprising at least one liquid fatty phase structured with at least one structuring polymer comprising a polymer skeleton comprising at least one hydrocarbon-based repeating unit comprising at least one hetero atom, wherein the at least one structuring polymer further comprises at least one terminal fatty chain, optionally functionalized, chosen from alkyl chains and alkenyl chains, wherein said at least one terminal fatty chain is bonded to said polymer skeleton via at least one linking group chosen from amides, ureas, and esters, wherein when said at least one linking group is chosen from esters, said at least one terminal fatty chain is chosen from branched alkyl groups and at least one solid substance that has a melting point of about 45°C or greater.

247. A composition according to claim 246, wherein said at least one structuring polymer may also comprise at least one pendant fatty chain, optionally functionalized, chosen from alkyl chains and alkenyl chains, wherein said at least one pendant fatty chain is bonded to said polymer skeleton via bonded to any carbon or hetero atom of the polymer skeleton via at least one linking group chosen from amides, ureas, and esters, wherein when said at least one linking group is chosen from esters, said at least one pendant fatty chain is chosen from branched alkyl groups.

248. A structured composition comprising at least one liquid fatty phase structured with at least one structuring polymer comprising a polymer skeleton comprising at least one hydrocarbon-based repeating unit comprising at least one hetero atom, wherein the at least one structuring polymer further comprises at least one pendant fatty chain, optionally functionalized, chosen from alkyl chains and alkenyl chains, wherein said at least one pendant fatty chain is bonded to said polymer skeleton via at least one linking group chosen from amides, ureas, and esters, wherein when said at least one linking group is chosen from esters, said at least one pendant

fatty chain is chosen from branched alkyl groups and at least one solid substance that has a melting point of about 45°C or greater.

249. A method for care, make up, or treatment of a keratin material chosen from lips, skin, and keratinous fibers, comprising the application to said keratin material of a cosmetic composition comprising:

at least one liquid fatty phase which comprises:

(i) at least one structuring polymer comprising:

a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one hetero atom; and

(ii) at least one solid substance that has a melting point of about 45°C or greater.

250. A method for making a cosmetic composition in the form of a physiologically acceptable composition comprising including in said composition at least one liquid fatty phase which comprises:

(i) at least one structuring polymer comprising:

a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one hetero atom; and

(ii) at least one solid substance that has a melting point of about 45°C or greater,

wherein said at least one solid substance is not stearalkonium hectorite, silica, talc or paraffin wax.

251. A composition comprising at least one liquid fatty phase which comprises:

(i) at least one structuring polymer comprising:

a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one hetero atom; and at least one terminal fatty chain chosen from alkyl chains and alkenyl chains, wherein said at least one terminal fatty chain is bonded to said polymer skeleton via at least one linking group; and

(ii) at least one solid substance that has a melting point of about 45°C or greater, wherein said at least one solid substance is not stearylalkonium hectorite, silica, talc or paraffin wax.

252. A method for providing at least one of resistance to shear and stability to a cosmetic composition, comprising including in said cosmetic composition at least one liquid fatty phase which comprises:

(i) at least one structuring polymer comprising:

a polymer skeleton which comprises at least one hydrocarbon-based repeating unit comprising at least one hetero atom; and

(ii) at least one solid substance that has a melting point of about 45°C or greater, wherein said at least one solid substance is not stearylalkonium hectorite, silica, talc or paraffin wax,

and further wherein said at least one structuring polymer and said at least one solid substance are present in a combined amount effective to provide at least one property chosen from resistance to shear and stability.

253. The composition according to claim 6, wherein said at least one linking group is chosen from urea, ester, and amine groups.

254. The composition according to claim 253, wherein said at least one linking group is chosen from ester and amine groups.

255. The composition according to claim 1, wherein said at least one solid substance has a melting point of about 47°C or greater.

256. The composition according to claim 85, wherein said at least one linking group is chosen from urea, ester, and amine groups.

257. The composition according to claim 256, wherein said at least one linking group is chosen from ester and amine groups.

258. The composition according to claim 80, wherein said at least one solid substance has a melting point of about 47°C or greater.

259. The anhydrous composition according to claim 162, wherein said at least one linking group is chosen from urea, ester, and amine groups.

260. The composition according to claim 259, wherein said at least one linking group is chosen from ester and amine groups.

261. The composition according to claim 157, wherein said at least one solid substance has a melting point of about 47°C or greater.

262. An anhydrous composition comprising at least one liquid fatty phase which comprises:

(i) at least one structuring polymer comprising:

a polymer skeleton which comprises at least three hydrocarbon-based repeating units comprising at least one hetero atom; and

(ii) at least one solid substance that has a melting point of about 45°C.

263. An anhydrous composition according to claim 262, wherein said at least three hydrocarbon-based repeating units are identical.

264. A treatment, care or make-up composition for skin or lips comprising a structured composition containing at least one liquid fatty phase structured with at least one structuring polymer comprising a polymer skeleton comprising at least one hydrocarbon-based repeating unit comprising at least one hetero atom, and at least one solid substance that has a melting point of about 45°C or greater.

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K7/02 A61K7/025 A61K7/027

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 871 536 A (ARRAUDEAU JEAN-PIERRE ET AL) 3 October 1989 (1989-10-03) claims 1,2,5,7-10; examples 1,7,8	1-264
X	US 6 103 249 A (ROULIER VERONIQUE ET AL) 15 August 2000 (2000-08-15) claims 1,6,20,21,39-41	1-264
E	EP 1 068 856 A (OREAL) 17 January 2001 (2001-01-17) page 4, paragraph 35 page 6, paragraph 51 page 9, paragraph 76; claims	1-264

☐ Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

& document member of the same patent family

Date of the actual completion of the international search

1 August 2001

Date of mailing of the international search report

08/08/2001

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Beyss, E

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 1-264

Present claims 1-264 relate to an extremely large number of possible products. Support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT is to be found, however, for only a very small proportion of the compounds claimed. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Consequently, the search has been carried out for those parts of the claims which appear to be supported and disclosed, namely those parts relating to the products prepared in the examples 1-3.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4871536	A	03-10-1989	LU 84210 A	07-03-1984
			AT 395676 B	25-02-1993
			AT 221083 A	15-07-1992
			AU 559588 B	12-03-1987
			AU 1586183 A	22-12-1983
			BE 897050 A	15-12-1983
			CA 1208832 A	29-07-1986
			CH 658186 A	31-10-1986
			DE 3321650 A	22-12-1983
			FR 2528699 A	23-12-1983
			GB 2123290 A, B	01-02-1984
			IT 1162880 B	01-04-1987
			JP 1764896 C	11-06-1993
			JP 4045484 B	27-07-1992
			JP 59007107 A	14-01-1984
			NL 8302171 A	16-01-1984
US 6103249	A	15-08-2000	FR 2734715 A	06-12-1996
			FR 2734716 A	06-12-1996
			BR 9608431 A	17-02-1999
			CA 2220401 A	05-12-1996
			CN 1191479 A	26-08-1998
			DE 69600182 D	16-04-1998
			DE 69600182 T	13-08-1998
			DK 745376 T	28-09-1998
			EP 0745376 A	04-12-1996
			ES 2116809 T	16-07-1998
			WO 9638126 A	05-12-1996
			JP 3014458 B	28-02-2000
			JP 10506643 T	30-06-1998
			PL 323623 A	14-04-1998
			RU 2147221 C	10-04-2000
			US 5897869 A	27-04-1999
EP 1068856	A	17-01-2001	FR 2796271 A	19-01-2001
			FR 2796272 A	19-01-2001
			BR 0003279 A	13-03-2001
			CN 1295829 A	23-05-2001